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BULLETIN No. 130-71

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# HYDROLOGIC DATA: 1971

## Volume III: CENTRAL COASTAL AREA

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DECEMBER 1972

**NORMAN B. LIVERMORE, JR.**  
*Secretary for Resources*  
The Resources Agency

**RONALD REAGAN**  
*Governor*  
State of California

**WILLIAM R. GIANELLI**  
*Director*  
Department of Water Resources



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Department of Water Resources

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DECEMBER 1972

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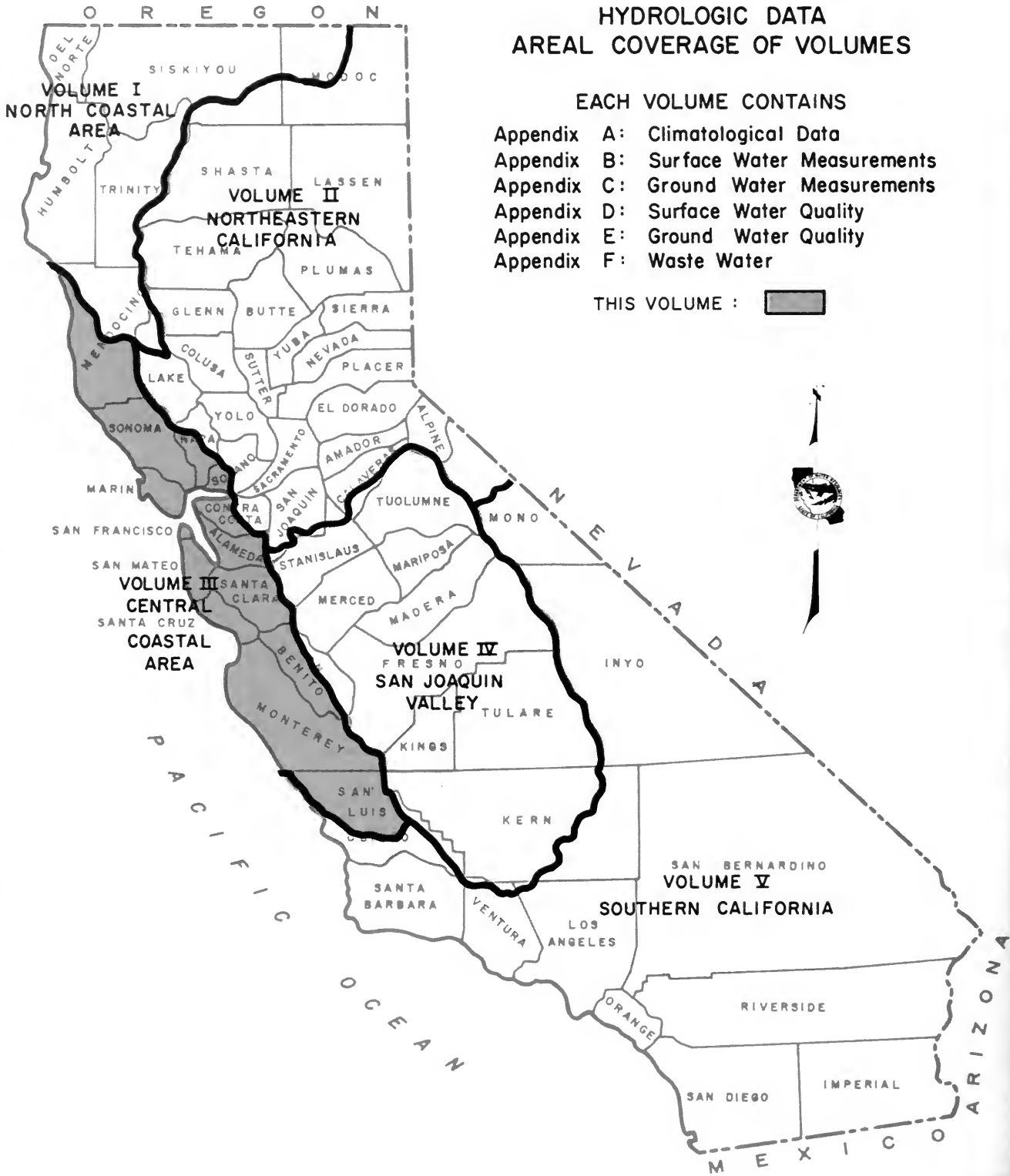
**WILLIAM R. GIANELLI**  
*Director*  
Department of Water Resources

# HYDROLOGIC DATA AREAL COVERAGE OF VOLUMES

## EACH VOLUME CONTAINS

- Appendix A: Climatological Data
- Appendix B: Surface Water Measurements
- Appendix C: Ground Water Measurements
- Appendix D: Surface Water Quality
- Appendix E: Ground Water Quality
- Appendix F: Waste Water

THIS VOLUME : 





## FOREWORD

The hydrologic data programs of the Department of Water Resources supplement the data collection activities of other agencies and help satisfy needs of these agencies for data on the quality and quantity of water in the State. Bulletin No. 130-71 presents accurate, comprehensive, and timely hydrologic data which provide a more complete knowledge of the factors affecting our environment and are prerequisites for effective planning, design, construction, and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map on the opposite page.

*William R. Gianelli*  
William R. Gianelli, Director  
Department of Water Resources  
The Resources Agency  
State of California  
October 25, 1972

## METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
1 Inch (in.)	2.54 Centimeters
1 Foot (ft.)	0.3048 Meters
1 Mile (mi.)	1.609 Kilometers
1 Acre	0.405 Hectares
1 Square mile (sq.mi.)	2.590 Square kilometers
1 U. S. gallon (gal.)	3.785 Liters
1 Acre-foot (ac.ft.)	1,233.5 Cubic meters
1 U. S. gallon per minute (gpm)	0.0631 Liters per second
1 Cubic foot per second (cfs)	1.7 Cubic meters per minute
1 Part per million (ppm)	1 Milligram per liter (mg/l)
1 Part per billion (ppb)	1 Microgram per liter (ug/l)
1 Part per trillion (ppt)	1 Nanogram per liter (ng/l)
1 Equivalent part per million (epm)	1 Milliequivalent per liter (me/l)
Degrees Fahrenheit (°F)	5/9 (°F-32) Degrees Celsius (°C)

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U. S. Bureau of Reclamation  
U. S. Coast Guard  
U. S. Geological Survey  
U. S. Soil Conservation Service

### State

Department of Public Health  
Department of Veterans Affairs  
Division of Highways  
Division of Forestry  
Regional Water Quality Control  
Board, Central Coast Region,  
North Coast Region, and San  
Francisco Bay Region  
University of California,  
Agricultural Extension Service  
Water Resources Control Board

### Local

Alameda County Flood Control and  
Water Conservation District  
Alameda County Water District  
City of San Francisco  
City of Vallejo  
East Bay Municipal Utility  
District  
Marin County  
Mendocino County  
Monterey County Flood Control and  
Water Conservation District  
Napa County  
San Benito County  
San Luis Obispo County Flood Control  
and Water Conservation District  
Santa Clara County Flood Control  
and Water District  
Santa Cruz County  
Solano Irrigation District  
Sonoma County Flood Control and  
Water Conservation District  
South Santa Clara Valley Water  
Conservation District

State of California  
The Resources Agency  
DEPARTMENT OF WATER RESOURCES

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## ABSTRACT

Report contains tables showing data on surface water measurements; ground water levels; surface and ground water quality; and waste water in the Central Coastal Area for the 1970-71 water year. Figures show the location of ground water basins; the average depth to water in wells; the location of surface water measurement and surface water quality stations; and major hydrographic area and subunit boundaries.



Appendix A: CLIMATOLOGICAL DATA



## INTRODUCTION

The Department of Water Resources has substantially reduced its collection and publication of climatological data in recent years. California's primary network of precipitation data which was formerly printed in this bulletin is available in "Climatological Data-California", "Hourly Precipitation Data-California", and "Storage Gage Precipitation Data in Western United States". These National Weather Service publications are available from:

Superintendent of Documents  
Government Printing Office  
Washington, D. C. 20402

The primary network of precipitation stations has been found to be inadequate for operating local water supply and small-scale flood control projects. Local agencies within the area covered by this report have responded to this need by establishing their own supplemental rain gage networks. Some of these agencies are:

U. S. Department of The Army,  
Corps of Engineers  
San Francisco District

Alameda County Flood Control and  
Water Conservation District

Contra Costa County Flood Control  
and Water District

Marin Municipal Water District

Marin County Department of  
Public Works

Monterey County

San Benito County

San Francisco County

San Luis Obispo County Flood Control  
and Water Conservation District

Santa Clara County Flood Control  
and Water District

Santa Cruz County Department of  
Public Works

Sonoma County Water Agency



Appendix B: SURFACE WATER MEASUREMENTS



## INTRODUCTION

This appendix contains surface water data for the period from October 1, 1970, through September 30, 1971. These data consist of the amounts of water imported to the report area; daily mean gage heights; daily maximum and minimum tides; and corrections and revisions to previously published reports of surface water data. Station locations are shown on Figure D-1, sheet 2, page 42.

In addition to data collected and published by the Department of Water Resources in this appendix, the U. S. Geological Survey collects and publishes data on many additional gaging stations for the same report area. This work is done under a federal-state cooperative contract or through local cooperative arrangements with other local or governmental agencies. The data published in the following reports, together with this report, present a comprehensive analysis of water resources for the area:

1. "Water Resources Data for California, Part 1: Surface Water Records, Volume I: Colorado River Basin, Southern Great Basin, and Pacific Slope Basins excluding Central Valley". U. S. Geological Survey.
2. Bulletin No. 120, "Water Conditions in California, Fall Issue". Department of Water Resources.
3. Bulletin No. 157, "Index to Stream Gaging Stations in and Adjacent to California, 1970". Department of Water Resources. This index contains the period of record -- with the number of years missing -- and more information for stations in the report area. The index also identifies the agency from which a particular record may be obtained.

TABLE B-1  
SURFACE WATER IMPORTS TO THE CENTRAL COASTAL AREA

Import	1971 Water Year												Total
	October	November	December	January	February	March	April	May	June	July	August	September	
<u>CITY OF VALLEJO FROM CACHE SLOUGH</u> a													
Total acre-feet	1,279	648	1,099	1,179	849	1,115	1,341	1,433	1,519	1,563	1,504	1,480	15,009
Average cubic feet per second	21	11	18	19	15	18	23	23	26	25	24	25	21
Monthly quantities in percent of seasonal	8.5	4.3	7.3	7.9	5.7	7.4	9.0	9.5	10.1	10.4	10.0	9.9	
<u>CONTRA COSTA CANAL</u> b													
Total acre-feet *	7,124	4,663	3,868	3,902	3,616	4,378	4,724	5,974	8,420	10,150	11,078	7,587	75,484
Average cubic feet per second *	116	78	63	63	65	71	79	97	142	165	180	128	104
Monthly quantities in percent of seasonal	9.4	6.2	5.1	5.2	4.8	5.8	6.2	7.9	11.2	13.4	14.7	10.1	
<u>HETCH HETCHY AQUEDUCT</u> c													
Total acre-feet	21,579	15,955	15,653	11,058	10,457	9,485	18,773	22,237	21,858	22,877	22,814	21,999	214,745
Average cubic feet per second	351	268	255	180	188	154	315	362	367	372	371	370	296
Monthly quantities in percent of seasonal	10.0	7.4	7.3	5.1	4.9	4.4	8.8	10.4	10.2	10.7	10.6	10.2	
<u>MOSELUNNE RIVER AQUEDUCT</u> d													
Total acre-feet	18,651	17,875	18,489	16,719	13,318	17,456	17,934	18,598	18,270	19,146	19,118	18,463	214,037
Average cubic feet per second	303	300	301	272	240	284	301	302	307	311	311	310	296
Monthly quantities in percent of seasonal	8.7	8.4	8.6	7.8	6.2	8.2	8.4	8.7	8.5	9.0	8.9	8.6	
<u>POTTER VALLEY POWERHOUSE FROM EEL RIVER</u> e													
Total acre-feet	17,440	16,120	18,890	18,770	17,170	18,850	16,950	18,790	15,010	6,280	4,000	8,070	176,340
Average cubic feet per second	284	271	307	305	309	307	285	306	252	102	65	136	243
Monthly quantities in percent of seasonal	9.9	9.1	10.7	10.6	9.7	10.7	9.6	10.7	8.5	3.6	2.3	4.6	
<u>PUTAH SOUTH CANAL</u> b													
Total acre-feet *	23,222	8,114	1,866	1,989	2,192	5,833	16,430	26,222	32,847	37,462	29,895	30,098	216,170
Average cubic feet per second *	378	136	30	32	39	95	276	426	552	609	486	506	299
Monthly quantities in percent of seasonal	10.7	3.8	0.9	0.9	1.0	2.7	7.6	12.2	15.2	17.3	13.8	13.9	
<u>SOUTH BAY AQUEDUCT</u>													
Total acre-feet	4,388	3,513	5,071	5,228	6,338	7,805	14,919	12,679	11,883	13,441	14,806	7,353	107,424
Average cubic feet per second	71	59	82	85	114	127	251	206	200	219	241	124	148
Monthly quantities in percent of seasonal	4.1	3.3	4.7	4.8	5.9	7.3	13.9	11.8	11.1	12.5	13.8	6.8	

a Data furnished by City of Vallejo.

b Data furnished by U. S. Bureau of Reclamation.

c Data furnished by City of San Francisco.

d Data furnished by East Bay Municipal Utility District.

e Data furnished by U. S. Geological Survey.

\* Amounts are total diversion into the canal; an unknown portion of this is imported to the Central Coastal Area.



**TABLE B-2**  
**DAILY MEAN GAGE HEIGHT**  
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1971	E31400	RECTOR RESERVOIR NEAR YOUNTVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	350.05	349.71	361.87	370.34	370.18	370.10	370.13	370.08	368.32	364.45	360.00	355.82	1
2	350.00	349.72	364.60	370.28	370.15	370.10	370.12	370.08	368.21	364.31	359.85	355.69	2
3	349.93	349.93	367.88	370.26	370.14	370.11	370.10	370.09	368.09	364.18	359.74	355.58	3
4	349.90	350.08	370.68	370.25	370.14	370.11	370.09	370.09	367.92	364.02	359.60	355.43	4
5	349.87	350.17	370.43	370.23	370.14	370.10	370.07	370.08	367.80	363.89	359.45	355.29	5
6	349.85	350.37	370.32	370.23	370.14	370.10	370.09	370.07	367.69	363.75	359.31	355.14	6
7	349.78	350.43	370.31	370.23	370.15	370.10	370.10	370.05	367.55	363.60	359.27	355.02	7
8	349.74	350.47	370.32	370.23	370.15	370.09	370.13	370.06	367.43	363.47	359.02	354.92	8
9	349.68	350.49	370.27	370.23	370.15	370.10	370.11	370.05	367.32	363.33	358.87	354.88	9
10	349.65	350.53	370.25	370.22	370.15	370.10	370.11	370.04	367.20	363.20	358.74	354.81	10
11	349.60	350.57	370.24	370.26	370.14	370.11	370.12	370.03	367.06	363.04	358.60	354.78	11
12	349.60	350.58	370.23	370.27	370.14	370.37	370.12	370.03	366.95	362.90	358.50	354.76	12
13	349.57	350.59	370.22	370.26	370.13	370.23	370.13	370.02	366.85	362.78	358.38	354.69	13
14	349.57	350.61	370.21	370.26	370.13	370.22	370.14	369.99	366.73	362.63	358.25	354.64	14
15	349.56	350.63	370.53	370.25	370.13	370.21	370.15	369.97	366.56	362.49	358.12	354.59	15
16	349.53	350.66	370.50	370.32	370.13	370.20	370.15	369.96	366.44	362.33	357.98	354.52	16
17	349.53	350.67	370.42	370.33	370.12	370.16	370.16	369.88	366.26	362.19	357.84	354.48	17
18	349.54	350.69	370.47	370.33	370.12	370.16	370.16	369.78	366.07	362.06	357.73	354.43	18
19	349.53	350.68	370.38	370.31	370.12	370.16	370.12	369.69	365.98	361.91	357.57	354.41	19
20	349.57	350.69	370.75	370.30	370.11	370.16	370.11	369.57	365.91	361.78	357.44	354.35	20
21	349.61	350.74	370.48	370.28	370.12	370.16	370.10	369.43	365.79	361.64	357.30	354.31	21
22	349.62	350.76	370.38	370.28	370.12	370.15	370.11	369.34	365.64	361.47	357.18	354.28	22
23	349.67	350.78	370.34	370.26	370.12	370.15	370.09	369.24	365.53	361.32	357.05	354.25	23
24	349.67	350.85	370.30	370.25	370.12	370.15	370.09	369.13	365.40	361.17	356.92	354.14	24
25	359.69	350.91	370.29	370.24	370.11	370.21	370.09	369.01	365.27	361.02	356.77	354.01	25
26	349.69	350.96	370.26	370.23	370.11	370.34	370.09	368.90	365.12	360.87	356.66	353.88	26
27	349.69	353.20	370.26	370.23	370.11	370.25	370.09	368.81	364.99	360.74	356.54	353.77	27
28	349.68	357.40	370.34	370.22	370.11	370.20	370.09	368.72	364.88	360.59	356.40	353.63	28
29	349.68	359.41	370.38	370.22	370.20	370.20	370.09	368.63	364.73	360.43	356.26	353.55	29
30	349.69	360.77	370.33	370.21	370.14	370.14	370.08	368.52	364.60	360.30	356.13	353.44	30
31	349.71		370.31	370.20		370.14		368.42		360.16	356.00		31

**MAXIMUM INSTANTANEOUS GAGE HEIGHTS**

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
12-4-70	1100	371.09									

E — ESTIMATED  
NR — NO RECORD  
NF — NO FLOW

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
38 26 24	122 20 36	SE 19 7N 4W					MAY 1948-DATE	5-48		0.00	USCGS

Rector Reservoir is located on Rector Creek about 3 miles northeast of Yountville. Gaging station is located on the outlet tower of the reservoir. Elevation of reservoir floor is 250 feet. Spillway elevation is 370 feet.

TABLE B-3  
DAILY MAXIMUM AND MINIMUM TIDES  
(IN FEET)

WATER YEAR	STATION NUMBER	STATION NAME
1971	B91110	SACRAMENTO RIVER AT COLLINSVILLE

DATE	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	DATE
1	5.70 2.14	6.05 1.39	7.30 4.53	5.74 1.54	6.12 2.25	5.47 1.03	5.75 1.30	5.41 1.26	5.17 1.60	5.94 2.52	6.34 1.91	6.50 1.59	1
2	5.97 2.20	6.20 3.58	7.05 5.07	5.78 1.75	6.20 1.97	5.25 0.92	5.34 1.23	5.00 1.25	5.53 2.23	6.07 2.21	6.55 1.86	5.07 1.75	2
3	6.20 2.25	6.21 1.53	6.52 2.21	5.22 1.27	5.99 1.62	5.23 0.93	5.18 1.34	5.20 1.52	5.78 2.17	6.29 1.94	6.70 1.83	6.28 1.57	3
4	6.16 3.47	5.96 1.74	6.00 2.43	5.59 1.64	5.93 1.45	5.55 1.16	5.04 1.40	5.20 1.57	5.90 1.85	6.46 1.78	4.93 1.72	6.30 1.75	4
5	6.31 2.04	5.80 1.67	5.74 1.92	5.94 1.70	5.97 1.41	5.01 0.92	5.25 1.79	5.57 2.05	4.43 1.64	4.80 1.73	6.59 1.63	6.33 2.21	5
6	6.16 2.12	5.51 1.60	6.00 2.11	5.96 1.43	6.08 1.47	4.97 0.92	5.26 1.81	5.93 2.16	6.04 1.55	6.70 1.72	6.64 1.68	6.15 2.27	6
7	5.68 1.71	5.19 1.62	6.45 2.53	6.21 1.39	6.05 1.38	5.23 0.97	5.44 1.96	5.83 1.36	6.31 1.61	6.91 1.78	6.50 1.69	6.09 2.02	7
8	5.72 1.33	5.25 1.55	6.92 2.89	6.41 1.48	5.99 1.44	5.28 1.09	5.34 2.06	6.38 1.48	6.53 1.54	6.78 1.58	6.19 1.69	6.41 2.48	8
9	5.96 1.46	5.62 1.85	7.05 2.38	6.61 1.61	5.56 1.15	5.23 1.23	5.42 1.95	5.88 1.46	6.67 1.61	6.68 1.47	5.80 1.73	6.55 2.12	9
10	5.90 1.85	5.93 1.91	6.83 2.07	6.71 1.81	5.44 1.27	5.13 1.34	5.74 1.79	6.12 1.58	6.71 1.53	6.35 1.36	5.93 1.96	6.50 2.06	10
11	5.47 1.94	6.23 1.84	6.76 1.94	6.76 1.93	5.28 1.50	5.05 1.59	5.64 1.57	6.43 1.70	6.52 1.47	6.10 1.37	6.31 2.54	6.26 1.93	11
12	5.88 2.16	6.21 1.44	6.86 2.03	6.59 2.17	5.04 1.58	5.95 2.27	5.72 1.47	6.41 1.52	6.34 1.42	5.78 1.46	6.41 1.72	6.12 1.72	12
13	6.03 2.35	6.20 1.26	6.92 2.04	6.50 2.03	5.09 1.91	5.40 2.02	5.94 1.64	6.24 1.37	5.91 1.31	5.70 1.62	6.50 2.20	6.19 1.65	13
14	6.26 2.13	6.20 1.29	6.62 1.90	5.94 1.88	5.32 2.35	5.18 1.74	6.06 1.57	6.11 1.29	5.39 1.15	6.10 2.04	6.53 1.82	6.21 1.82	14
15	6.30 1.90	6.28 1.36	6.38 4.06	5.51 3.47	5.48 2.42	5.15 1.41	6.03 1.51	5.94 1.34	5.54 1.33	6.38 2.55	6.51 1.85	5.44 1.92	15
16	6.36 1.78	6.04 3.57	6.56 2.20	5.24 1.82	5.47 2.31	5.25 1.46	5.97 1.66	5.15 0.82	5.96 1.84	6.62 2.30	6.47 1.73	6.23 2.14	16
17	6.34 3.42	5.66 1.32	5.95 2.32	5.24 1.91	5.81 2.28	5.40 1.29	5.93 1.62	4.92 0.83	6.43 2.31	6.58 2.10	5.02 1.72	6.39 2.43	17
18	6.15 1.70	5.37 1.29	5.88 2.21	5.38 2.24	5.37 1.61	5.31 1.21	5.14 1.07	5.34 1.20	6.53 2.07	6.73 1.70	6.43 1.74	6.21 2.44	18
19	6.12 1.58	4.93 1.39	5.76 2.15	5.60 2.57	5.61 1.22	5.32 1.25	5.17 1.36	5.76 1.56	6.61 1.76	5.03 1.70	6.49 1.99	5.88 2.35	19
20	5.75 1.72	5.00 1.41	5.91 2.49	5.83 2.26	5.42 1.01	5.58 1.32	5.43 1.59	6.33 2.16	4.77 1.58	6.85 1.84	6.25 1.84	5.95 2.60	20
21	5.51 1.58	5.28 1.75	6.42 3.46	5.97 2.01	5.67 1.01	5.55 1.23	5.07 1.44	4.69 2.00	6.69 1.54	6.85 1.88	6.01 1.85	5.97 1.88	21
22	5.04 1.84	5.43 1.97	6.07 2.61	6.20 1.96	6.07 1.37	5.65 1.24	5.47 1.71	6.35 1.61	6.76 1.53	6.70 1.84	5.81 1.94	5.90 2.21	22
23	5.14 1.55	5.40 2.08	5.82 2.13	6.46 1.88	6.10 1.23	5.79 1.38	5.78 1.68	6.73 1.72	6.75 1.51	6.51 1.84	5.52 2.04	5.92 3.26	23
24	5.06 1.70	5.78 2.17	6.21 1.93	6.72 1.85	5.98 1.36	5.76 1.53	6.13 1.45	6.86 1.57	6.61 1.51	6.33 1.82	5.66 2.32	6.14 2.18	24
25	5.15 1.74	6.30 2.34	6.19 1.66	6.65 1.68	5.38 0.93	5.74 1.87	6.28 1.34	6.78 1.49	6.33 1.51	6.02 1.90	5.92 2.52	5.98 2.32	25
26	4.94 1.78	6.58 2.12	6.53 1.72	6.51 1.63	4.80 0.98	6.09 2.24	6.63 1.38	6.76 1.40	5.99 1.51	5.61 1.99	6.09 2.72	5.87 1.98	26
27	4.85 1.44	6.73 2.54	6.88 1.79	6.48 1.66	4.86 1.42	6.03 1.92	6.50 1.28	6.53 1.55	5.65 1.56	5.57 2.06	6.00 2.56	5.77 1.83	27
28	5.05 1.36	7.26 2.37	6.94 2.00	6.19 1.68	5.40 1.55	6.12 1.67	6.48 1.28	5.89 1.02	5.38 1.56	5.65 2.29	5.96 2.20	5.68 1.63	28
29	5.56 1.50	7.49 2.52	6.83 1.69	5.70 1.63	5.70 1.63	6.39 1.77	6.11 1.12	5.51 1.21	5.43 1.80	5.71 2.59	6.06 2.04	6.18 1.55	29
30	6.02 1.57	7.53 2.62	6.46 3.51	5.54 2.50	5.54 2.50	6.72 2.02	5.56 1.02	5.26 1.44	5.66 2.30	5.89 2.30	6.22 1.84	5.67 1.87	30
31	5.93 1.38		6.14 1.57	5.79 1.79		6.12 1.33		5.13 1.34		6.14 2.06	6.24 1.72		31
MAXIMUM	6.36	7.53	7.30	6.76	6.20	6.72	6.63	6.86	6.76	6.91	6.70	6.55	MAXIMUM
MINIMUM	1.33	1.26	1.57	1.27	0.93	0.92	1.02	0.82	1.15	1.36	1.63	1.55	MINIMUM

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R., M.O.B. & M	CFS	GAGE HT	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
								FROM	TO		
38 04 25	121 51 18	SW 27 3N 1E		9.2	4-6-1958			JUNE 1929-DATE	1929	0.00	USED
									1929	-3.05	USCGS
									1964	-3.54	USCGS
									1964	-3.00	USCGS

TABLE B-3 (CONT.)  
DAILY MAXIMUM AND MINIMUM TIDES  
(IN FEET)

WATER YEAR	STATION NUMBER	STATION NAME
1971	E03300	SUISUN BAY AT BENICIA

DATE	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	DATE
1	3.10 -1.64	3.39 -2.62	4.50 -1.68	3.02 -2.58	3.46 -1.66	2.86 -2.98	2.90 -3.06	2.54 -2.70	2.37 -1.81	3.03 -0.95	3.38 -1.79	3.55 -2.36	1
2	3.35 -1.69	3.51 -2.46	4.18 -2.30	3.08 -2.82	3.43 -2.09	2.68 -3.25	2.43 -2.88	2.26 -2.46	2.58 -1.09	3.14 -1.43	3.56 -1.94	3.51 -2.31	2
3	3.42 -1.82	3.47 -2.15	3.70 -1.85	2.50 -2.03	3.16 -2.51	2.59 -3.10	2.29 -2.68	2.43 -2.16	2.81 -1.54	3.33 -1.81	3.81 -2.08	3.62 -2.54	3
4	3.36 -1.95	3.29 -2.11	3.13 -2.34	2.87 -2.08	3.14 -2.76	2.71 -2.84	2.21 -2.55	2.48 -2.03	3.05 -2.05	3.59 -2.06	3.79 -2.34	2.82 -2.30	4
5	3.45 -1.73	2.98 0.97	2.89 -0.13	3.20 -3.20	3.19 -2.90	2.25 -3.48	2.36 -2.24	2.81 -1.44	3.21 -2.38	3.85 -2.28	3.92 -2.52	3.67 -1.93	5
6	3.26 0.85	2.70 -2.20	3.14 -2.01	3.23 -2.83	3.30 -2.94	2.29 -3.45	2.59 -2.24	3.11 -1.64	3.48 -2.57	4.05 -2.35	2.31 -2.48	3.45 -1.73	6
7	2.87 -2.06	2.59 -2.16	3.59 -1.32	3.45 -3.00	3.32 -3.02	2.45 -3.07	2.56 -2.07	3.17 -1.93	3.71 -2.66	2.27 -2.39	3.80 -2.55	3.56 -1.92	7
8	2.91 -2.43	2.70 -2.28	4.03 -1.60	3.69 -2.94	3.25 -2.99	2.55 -2.93	2.18 -1.86	1.96 -2.27	2.13 -2.70	4.02 -2.76	3.48 -2.46	3.84 -1.85	8
9	3.13 -2.30	3.09 -1.91	4.16 -2.35	3.95 -2.84	2.86 -3.18	2.53 -2.81	2.65 -2.05	3.08 -2.76	3.84 -2.82	3.92 -2.89	3.09 -2.27	3.88 -1.92	9
10	3.14 -1.96	3.46 -2.01	3.97 -2.70	4.04 -2.59	2.77 -2.94	2.46 -2.63	2.93 -2.33	3.24 -2.76	3.91 -2.90	3.60 -2.99	3.28 -1.92	3.70 0.13	10
11	3.09 -1.93	3.72 -2.24	3.98 -2.87	4.17 -2.42	2.62 -2.62	2.40 -2.28	2.86 -2.63	3.42 -2.73	3.76 -2.87	3.31 -2.82	3.59 -1.22	3.44 -2.03	11
12	3.06 -1.84	3.63 -2.78	4.11 -2.80	3.88 -2.17	2.30 -2.40	3.33 -1.49	2.94 -2.75	3.50 -2.86	3.52 -2.88	3.01 -2.55	3.62 -0.68	3.35 -2.21	12
13	3.39 -1.62	3.67 -3.01	4.16 -2.79	3.73 -2.29	2.46 -1.87	2.71 -1.82	3.12 -2.62	3.45 -3.03	3.03 -2.95	3.10 -2.24	3.68 -1.57	3.40 -2.23	13
14	3.69 -1.92	3.66 -2.92	3.81 -2.79	3.20 -2.33	2.65 -1.31	2.46 -2.05	3.41 -2.63	3.25 -3.03	2.59 -2.93	3.41 -1.56	3.66 -1.83	3.41 -2.06	14
15	3.74 -2.25	3.62 -2.81	3.54 -2.20	2.78 -2.21	2.71 -1.35	2.42 -2.54	3.10 -2.77	3.09 -2.92	2.92 -2.52	3.67 -1.33	3.62 -2.07	3.42 -1.95	15
16	3.77 -2.42	3.31 -2.72	3.72 -2.06	2.54 -1.81	2.71 -1.24	2.48 -2.49	3.04 -2.53	2.34 -3.55	3.34 -1.71	3.81 -1.65	3.63 -2.21	3.41 -1.81	16
17	3.72 -2.43	2.93 -2.65	3.07 -1.94	2.46 -1.20	2.92 -1.43	2.56 -2.55	3.05 -2.47	2.14 -3.23	3.75 -1.44	3.80 -1.98	3.61 -2.33	2.95 -1.56	17
18	3.49 -2.43	2.59 -2.47	3.17 -1.53	2.53 -0.78	2.49 -2.07	2.48 -2.56	2.27 -2.94	2.61 -2.69	3.76 -1.84	3.91 -2.32	3.65 -2.32	3.26 -1.47	18
19	3.27 -2.16	2.21 0.56	2.85 -1.01	2.67 -0.97	2.57 -2.61	2.44 -2.48	2.33 -2.66	3.11 -2.26	3.89 -2.30	4.02 -2.53	2.43 -2.18	3.08 -1.47	19
20	2.93 0.98	2.28 -2.21	2.95 0.63	2.86 -1.58	2.56 -3.05	2.64 -2.49	2.64 -2.69	3.53 -1.79	3.97 -2.69	4.04 -2.48	3.45 -2.22	3.17 -1.19	20
21	2.68 -2.21	2.57 -1.72	3.50 -0.16	2.96 -2.11	2.95 -3.24	2.63 -2.80	2.76 -2.80	3.74 -2.14	4.02 -2.90	2.37 -2.47	3.24 -2.12	3.21 -1.47	21
22	2.31 -1.72	2.74 -1.38	3.13 -1.19	3.21 -2.48	3.30 -3.00	2.76 -2.93	3.15 -2.42	4.05 -2.61	2.19 -2.99	3.85 -2.52	3.00 -1.95	3.19 -1.68	22
23	2.45 -2.04	2.69 -1.45	2.97 -1.85	3.53 -2.83	3.47 -3.17	3.03 -2.85	3.44 -2.54	2.29 -2.73	3.97 -2.95	3.66 -2.44	2.78 -1.74	3.08 -1.72	23
24	2.38 -1.97	3.09 -1.53	3.28 -2.33	3.80 -3.01	3.44 -3.02	3.06 -2.68	2.12 -3.07	4.09 -3.02	3.88 -2.85	3.45 -2.19	2.92 -1.32	3.26 -1.50	24
25	2.49 -1.91	3.62 -1.51	3.45 -2.75	3.80 -3.29	2.77 -3.50	3.14 -2.15	3.66 -3.19	4.10 -3.09	3.55 -2.76	3.03 -2.13	3.09 -0.99	3.16 -1.75	25
26	2.38 -1.86	3.70 -1.88	3.84 -2.82	3.74 -3.30	2.32 -3.32	3.56 -1.88	4.04 -3.15	3.99 -3.09	3.17 -2.56	2.63 -1.93	3.22 -1.17	2.92 1.05	26
27	2.33 -2.27	4.05 -1.35	4.14 -2.87	3.79 -3.23	2.34 -2.68	3.35 -2.38	3.86 -3.31	3.81 -2.88	2.86 -2.33	2.75 -1.56	3.02 0.16	2.65 -1.92	27
28	2.50 -2.44	4.63 -1.74	4.24 -2.61	3.52 -3.03	2.85 -2.64	3.44 -2.81	3.69 -3.18	3.21 -3.21	2.59 -2.17	2.78 -1.06	2.90 -1.45	2.75 -2.11	28
29	2.99 -2.34	4.83 -1.77	4.16 -3.06	3.06 -2.89	3.68 -2.72	3.25 -3.18	2.76 -3.18	2.76 -2.83	2.67 -1.63	2.79 -0.90	3.02 -1.67	3.30 -2.28	29
30	3.42 -2.31	4.82 -1.81	3.78 -3.14	2.97 -2.43	3.19 -3.49	3.27 -3.21	2.30 -3.14	2.30 -2.63	2.82 -0.96	2.90 -1.33	3.26 -1.90	2.87 -2.05	30
31	3.29 -2.58	3.41 -3.05	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	3.19 -1.56	31
MAXIMUM	3.77	4.83	4.50	4.17	3.47	3.85	4.04	4.10	4.02	4.05	3.92	3.88	MAXIMUM
MINIMUM	-2.58	-3.01	-3.14	-3.30	-3.50	-3.48	-3.31	-3.55	-2.99	-2.99	-2.55	-2.54	MINIMUM

LOCATION				MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R., M. D. B. & M.		CFS	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
									FROM	TO		
38 02 27	122 08 04	SW 6	2N 2W	5.7	4-6-1958			JUNE 29-APR 40	1929	1940	-2.21	USCGS
								APR 40-DATE	1940	1942	-5.00	USCGS
									1942		0.00	USCGS

Station located on channel side of wharf (formerly located on Inshore side of wharf) immediately southeast of Benicia. Period of record intermittent from 1929 to 1940.

**TABLE B-4**  
**CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS OF SURFACE WATER DATA**

Location of Error or Revision				Change or Revision		
Report	Page	Mile & Bank	Name	Item	From	To
Bulletin No. 23-62	394		Suisun Bay at Benicia Arsenal	<u>1962</u> Daily Maximum and Minimum Tides for the period 3-1-62 to 3-28-62, inclusive	Published values	2.00 feet lower than published values
				Maximum for March 1962	16.72	14.72
Bulletin No. 130-63	B-7		Suisun Bay at Benicia Arsenal	<u>1963</u> Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	48		Suisun Bay at Benicia Arsenal	<u>1964</u> Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	52		City of Vallejo from Cache Slough	Total acre-feet	Published values	Values published in Bulletin No. 130-66 Table B-2
				Average cubic feet per second	Published values	Values published in Bulletin No. 130-66 Table B-2
				Monthly quantities in percent of seasonal	Published values	Values published in Bulletin No. 130-66 Table B-2
Bulletin No. 130-67	44		Sacramento River at Collinsville	<u>1967</u> Daily Maximum and Minimum Tides		<u>Notation:</u> In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.
Bulletin No. 130-67	45		Suisun Bay at Benicia Arsenal	Daily Maximum and Minimum Tides		<u>Notation:</u> In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.

Appendix C: GROUND WATER MEASUREMENTS



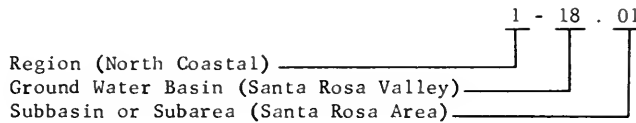
INTRODUCTION

This appendix contains ground water level measurements from 385 wells for the period October 1, 1970, through September 30, 1971. It contains tables which summarize the measurements and bar graphs of average depth to water in selected basins.

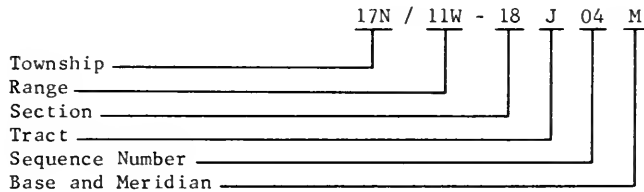
There are 28 ground water basins or areas in the Central Coastal Area for which data are reported. Wells are selected to reflect the ground water conditions of the area. These wells are continuously reviewed, and when conditions dictate, replacement wells are located and measured.

Two numbering systems are used by the Department to facilitate processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System as described below.

The regions used in this report are geographic areas defined in Section 13200 of the Water Code. That portion of Northern California covered by this report comprises the southern portion of North Coastal Region No. 1, the northern portion of Central Coastal Region No. 3, and all of San Francisco Bay Region No. 2. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and subbasins or subareas as follows:



The State Well Numbering System is based on township, range, and section subdivisions of the public land survey. The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below:



This number identifies and locates the well. In the example, the well is in Township 17 North, Range 11 West, Tract J of Section 18, located in the Mount Diablo Base and Meridian. A section is divided into 40-acre tracts as follows:

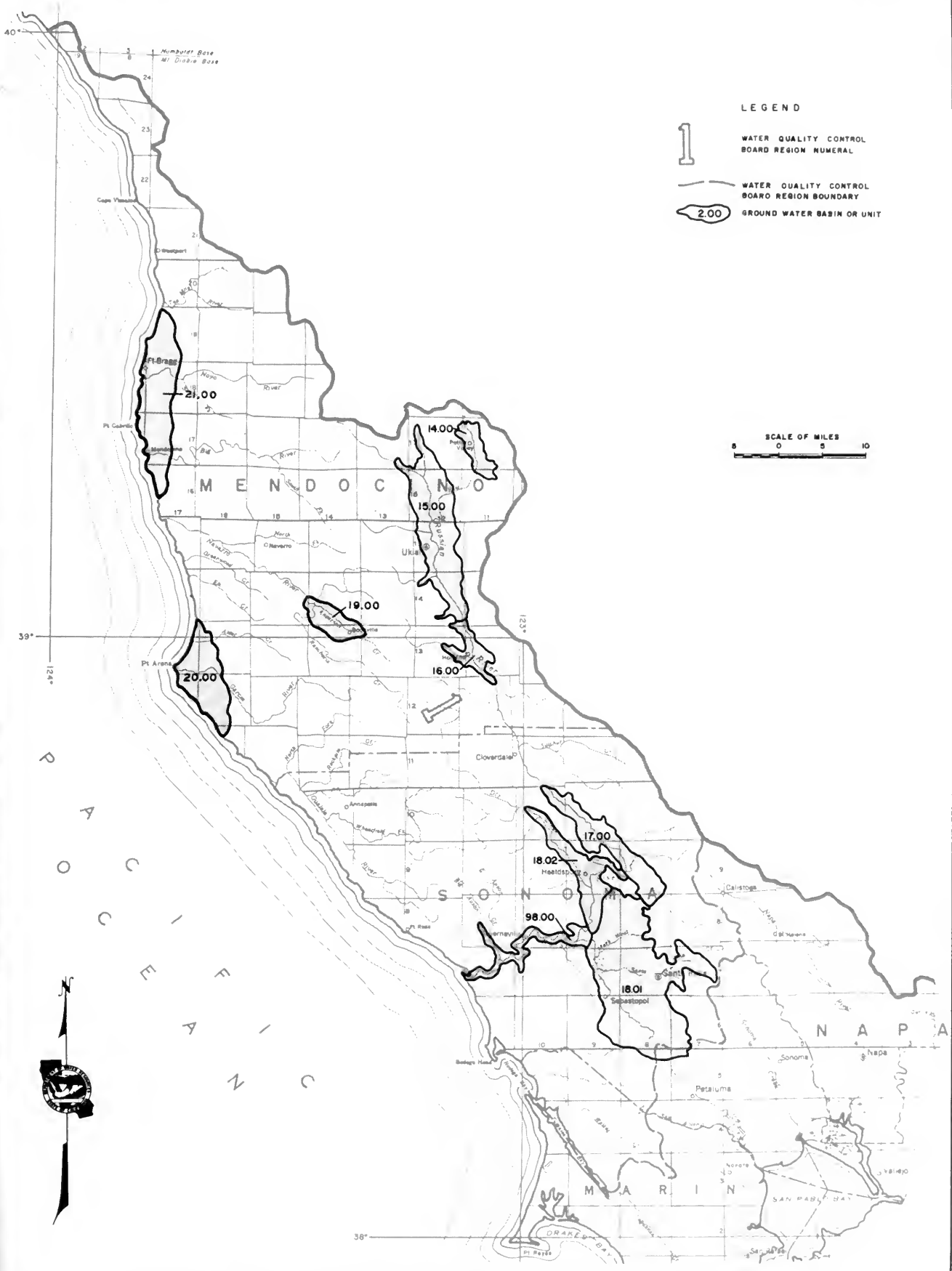
D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Sequence numbers in a tract are generally assigned in chronological order. The example designates the fourth well to be assigned a number in Tract J.

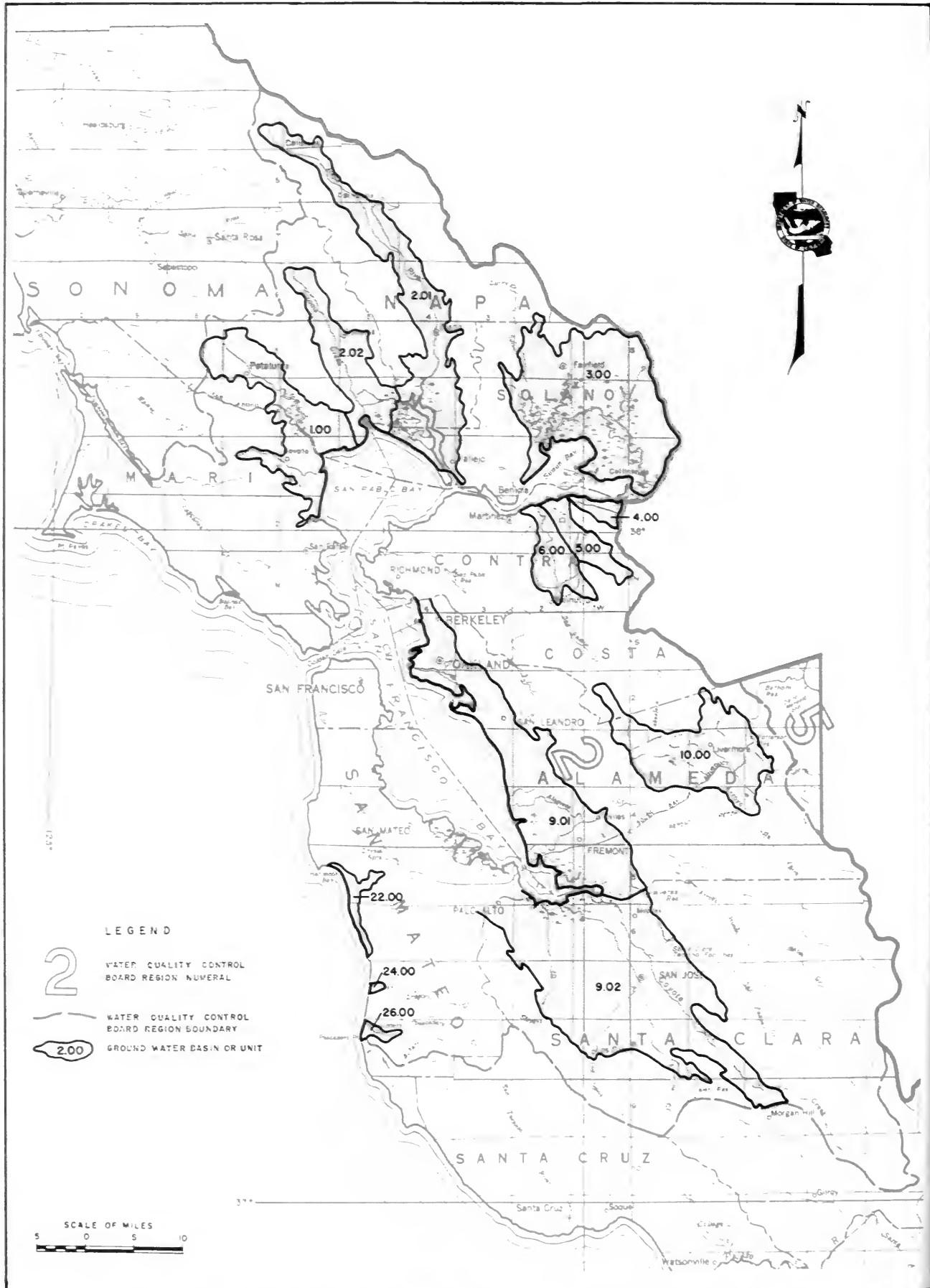
INDEX TO GROUND WATER MEASUREMENT DATA  
IN THE CENTRAL COASTAL AREA

<u>Number</u>	<u>Basin</u>	<u>Page</u>
NORTH COASTAL REGION 1-00.00 (Figure C-1, Sheet 1)		
1-14.00	Potter Valley . . . . .	20, 27
1-15.00	Ukiah Valley . . . . .	20, 27
1-16.00	Sanel Valley . . . . .	20, 27
1-17.00	Alexander Valley . . . . .	20, 27
1-18.00	Santa Rosa Valley	
1-18.01	Santa Rosa Area . . . . .	20, 27
1-18.02	Healdsburg Area . . . . .	20, 27
1-19.00	Anderson Valley . . . . .	
1-20.00	Point Arena . . . . .	
1-21.00	Fort Bragg Terrace . . . . .	
1-98.00	Lower Russian River Valley . . . . .	
SAN FRANCISCO BAY REGION 2-00.00 (Figure C-1, Sheet 2)		
2-01.00	Petaluma Valley . . . . .	20, 28
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley . . . . .	20, 28
2-02.02	Sonoma Valley . . . . .	20, 29
2-03.00	Suisun-Fairfield Valley . . . . .	20, 29
2-04.00	Pittsburg Plain . . . . .	20, 30
2-05.00	Clayton Valley . . . . .	
2-06.00	Ygnacio Valley . . . . .	20, 30
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area . . . . .	20, 30
2-09.02	South Bay Area . . . . .	20, 31
2-10.00	Livermore Valley . . . . .	20, 32
2-22.00	Half Moon Bay Terrace . . . . .	
2-24.00	San Gregorio Valley . . . . .	
2-26.00	Pescadero Valley . . . . .	
CENTRAL COASTAL REGION 3-00.00 (Figure C-1, Sheet 3)		
3-01.00	Soquel Valley . . . . .	
3-02.00	Pajaro Valley . . . . .	20, 34
3-03.00	Gilroy-Hollister Valley	
3-03.01	South Santa Clara County . . . . .	20, 34
3-03.02	San Benito County . . . . .	20, 34
3-04.00	Salinas Valley	
3-04.01	Pressure Area . . . . .	20, 34
3-04.02	East Side Area . . . . .	20, 35
3-04.03	Forebay Area . . . . .	20
3-04.04	Arroyo Seco Cone . . . . .	20, 35
3-04.05	Upper Valley Area . . . . .	20, 35
3-04.06	Paso Robles Basin . . . . .	20, 35
3-04.08	Seaside Area . . . . .	20, 36
3-04.09	Langley Area . . . . .	20
3-04.10	Corral De Tierra Area . . . . .	20
3-07.00	Carmel Valley . . . . .	20, 36
3-26.00	West Santa Cruz Terrace . . . . .	

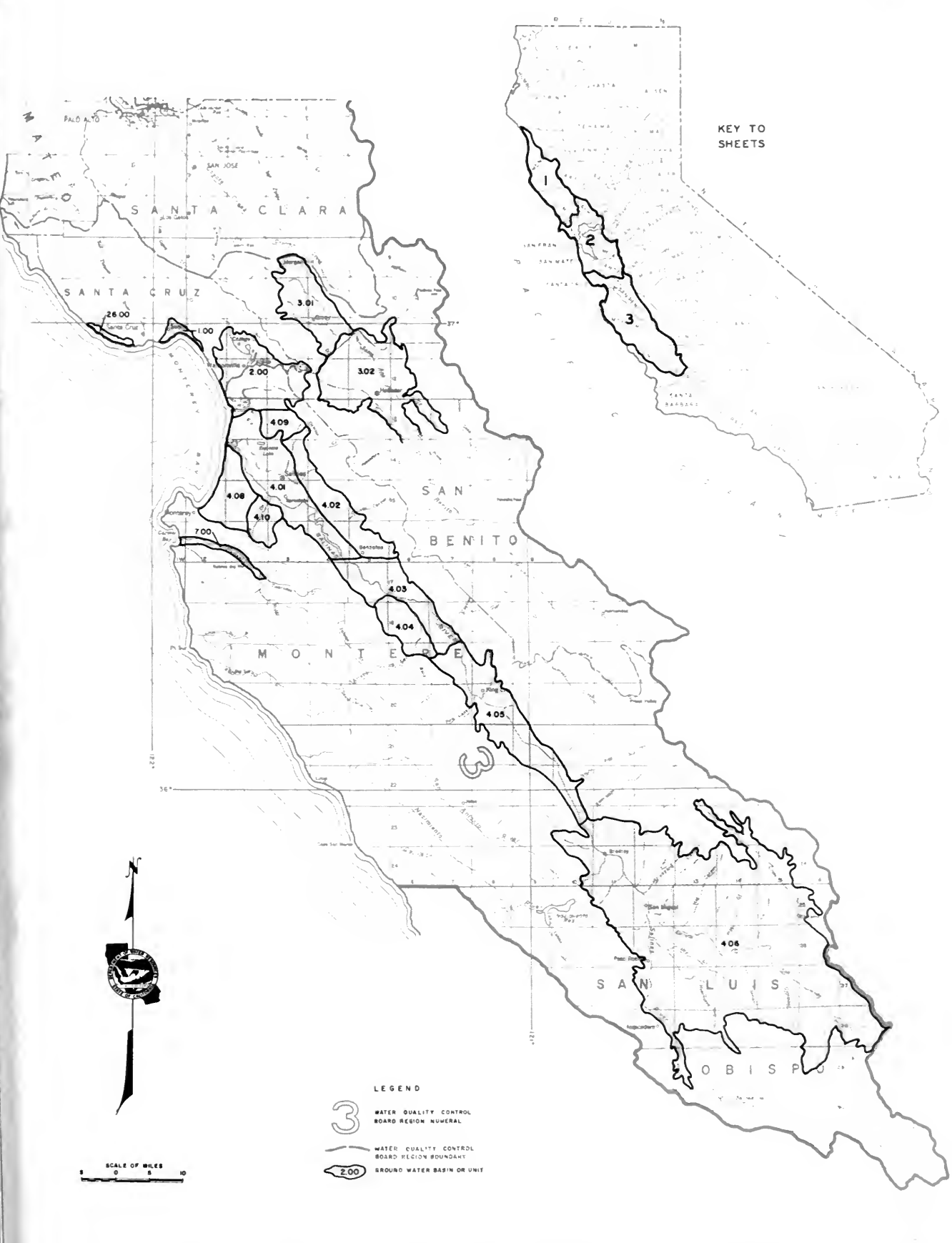




GROUND WATER BASINS IN THE CENTRAL COASTAL AREA



GROUND WATER BASINS IN THE CENTRAL COASTAL AREA



GROUND WATER BASINS IN THE CENTRAL COASTAL AREA

TABLE C-1

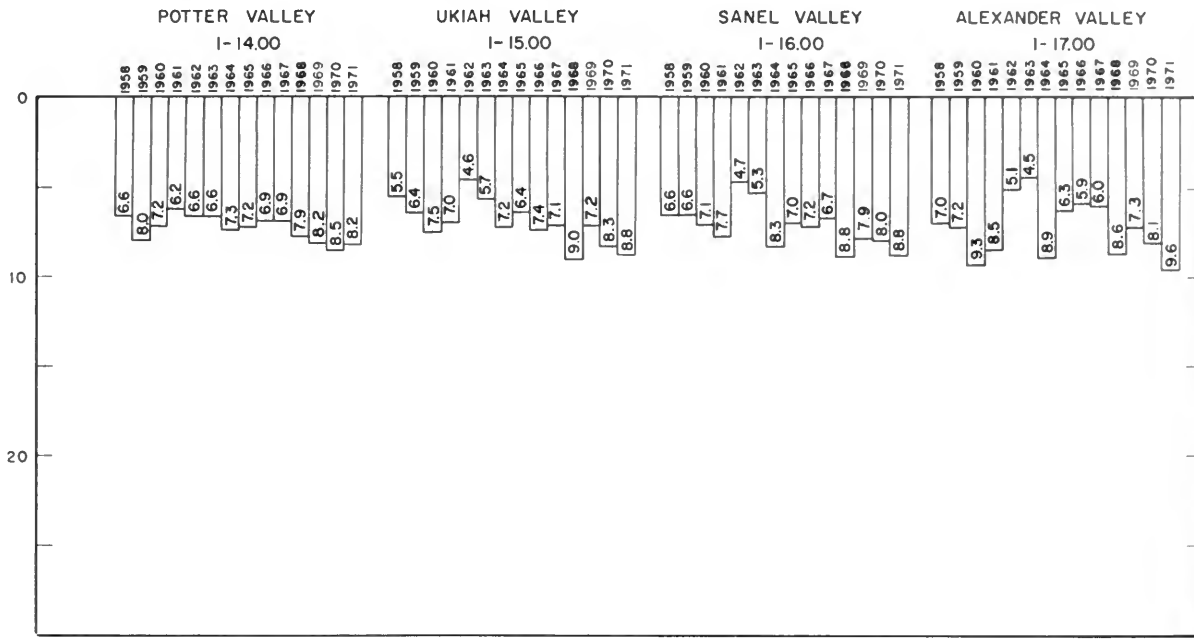
AVERAGE CHANGE OF GROUND WATER LEVELS  
AND SUMMARY OF WELL MEASUREMENTS REPORTED

Ground Water Basin or Area		Average Change Spring 1970 to Spring 1971 in Feet	Measuring Agency	Number of Wells Reported		
Name	Number			Monthly 1970-71	Fall 1970	Spring 1971
<b>NORTH COASTAL REGION</b>						
Potter Valley	1-14.00	+0.3	Department of Water Resources		2	2
Ukiah Valley	1-15.00	-0.5	Department of Water Resources		2	2
Sanel Valley	1-16.00	-0.8	Department of Water Resources		3	3
Alexander Valley	1-17.00	-1.5	Department of Water Resources		6	6
Santa Rosa Valley	1-18.00					
Santa Rosa Area	1-18.01	-0.6	Department of Water Resources		12	12
Healdsburg Area	1-18.02	-0.4	U. S. Geological Survey	9		
<b>SAN FRANCISCO BAY REGION</b>						
Petaluma Valley	2-01.00	-1.5	Department of Water Resources		6	6
Napa-Sonoma Valley	2-02.00					
Napa Valley	2-02.01	-0.2	Napa County Department of Water Resources		5	112 5
Sonoma Valley	2-02.02	0.0	Department of Water Resources		5	5
Suisun-Fairfield Valley	2-03.00	-0.8	Solano County Department of Water Resources	7	16	15
Pittsburg Plain	2-04.00	-0.2	Department of Water Resources		6	6
Ygnacio Valley	2-06.00	-0.4	Department of Water Resources		5	5
Santa Clara Valley	2-09.00					
East Bay Area	2-09.01	+0.3	Alameda County FC & WCD Alameda County Water District	3 2	6 3	6 3
South Bay Area	2-09.02	+3.7	Santa Clara Valley WCD	16		
Livermore Valley	2-10.00	+2.5	Alameda County FC & WCD	8	59	58
<b>CENTRAL COASTAL REGION</b>						
Pajaro Valley	3-02.00	-1.2*	Monterey County FC & WCD Department of Water Resources	3	2 5	5
Gilroy-Hollister Valley	3-03.00	-7.9				
South Santa Clara County	3-03.01	-9.2	Santa Clara Valley WCD Department of Water Resources		7 7	7 7
San Benito County	3-03.02	-0.1	San Benito County Department of Water Resources		5	2 5
Salinas Valley	3-04.00	+0.1*				
Pressure Area	3-04.01	+0.8*	Monterey County FC & WCD	3	4	
East Side Area	3-04.02	+0.3*	Monterey County FC & WCD		1	
Forebay Area	3-04.03	+1.7*				
Arroyo Seco Cone	3-04.04	-4.6*	Monterey County FC & WCD	2		
Upper Valley Area	3-04.05	-0.8*	Monterey County FC & WCD	3	2	
Paso Robles Basin	3-04.06	-3.1*	San Luis Obispo FC & WCD	5	43	44
Seaside Area	3-04.08	-1.6*	Post Engineer, Fort Ord	2		
Langley Area	3-04.09	-0.8*				
Corral de Tierra Area	3-04.10	-1.1*				
Carmel Valley	3-07.00	-3.2*	Monterey County FC & WCD	4		
<b>TOTAL</b>				<b>67</b>	<b>212</b>	<b>316</b>

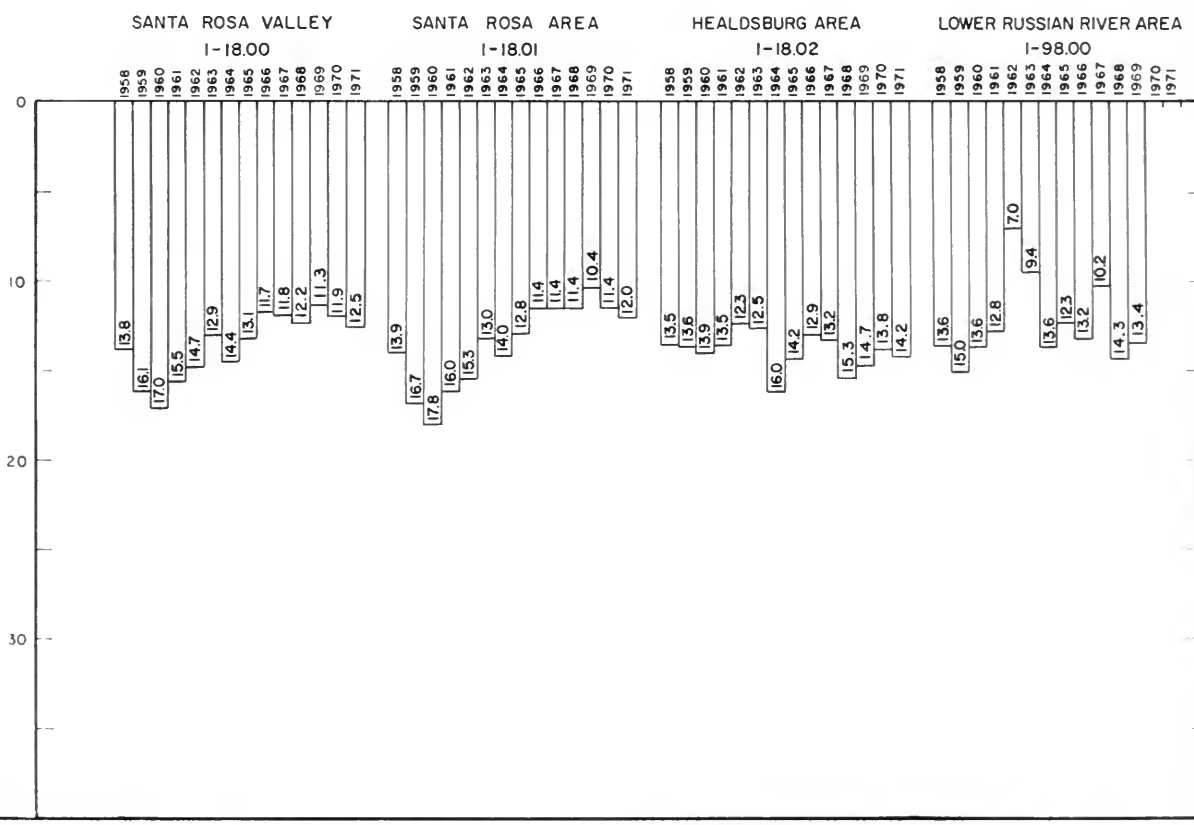
\*Average change determined from water level measurements made during fall of 1969 and fall of 1970.

130-71

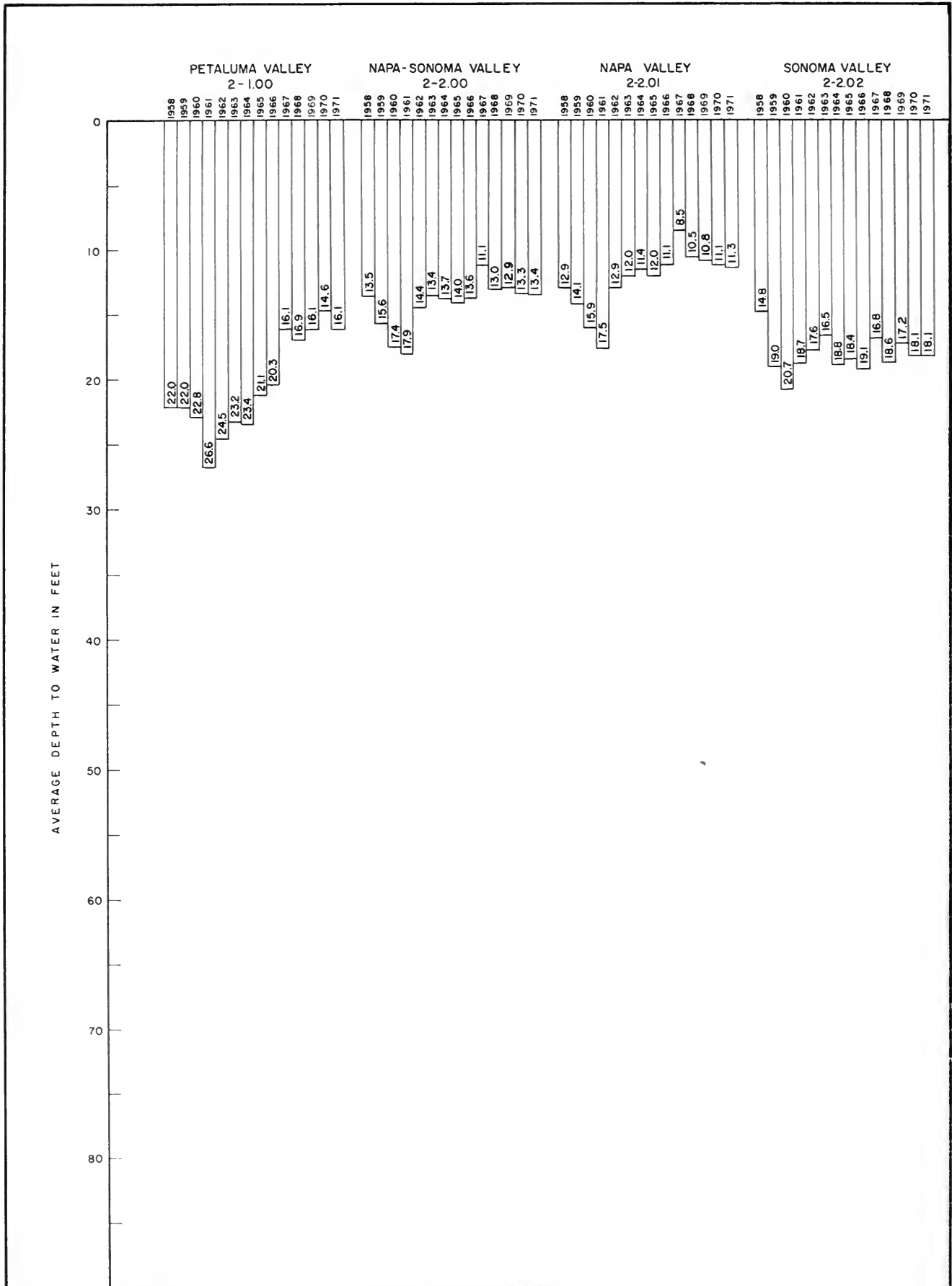
AVERAGE DEPTH TO WATER IN FEET



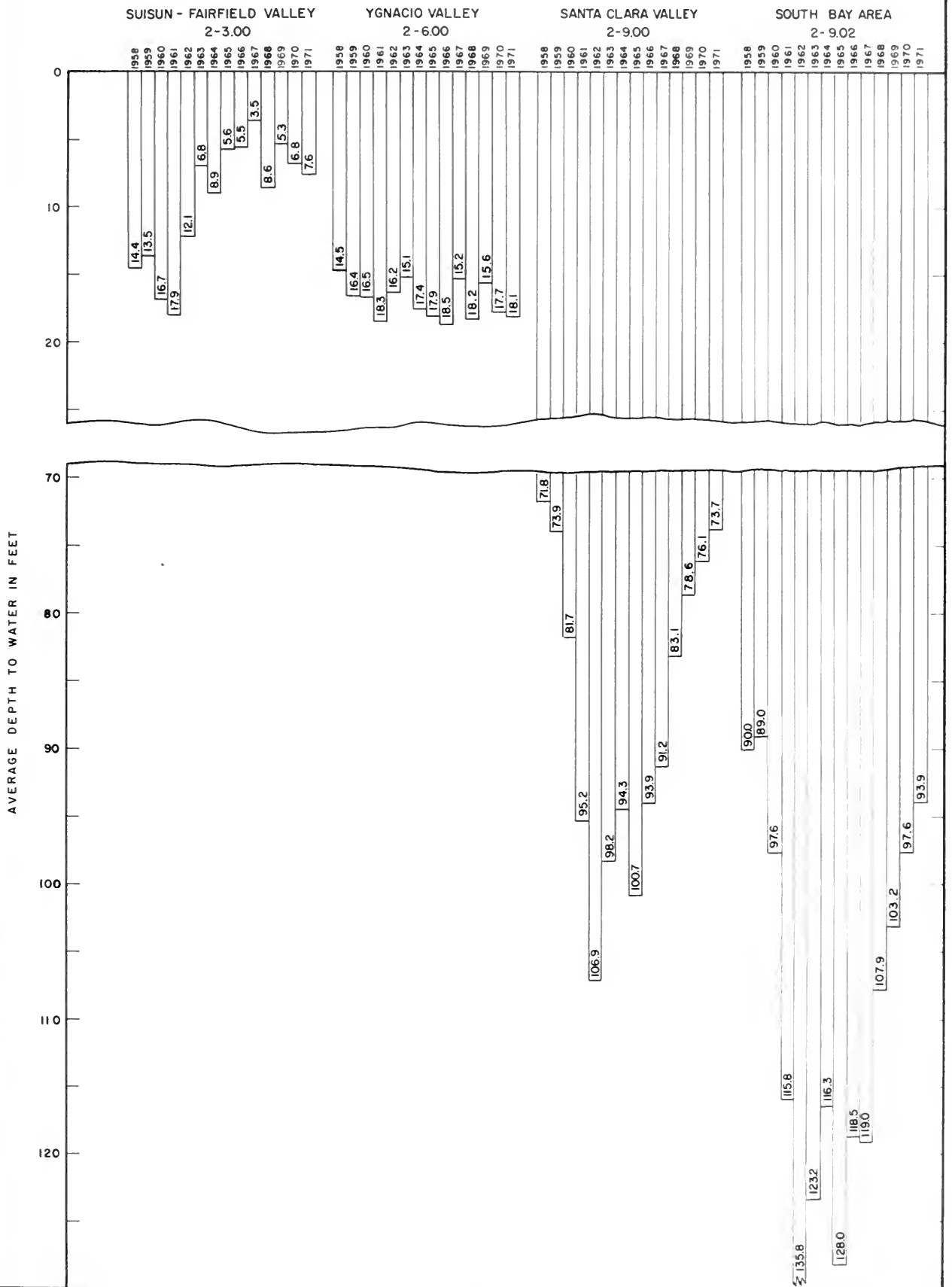
130 - 71



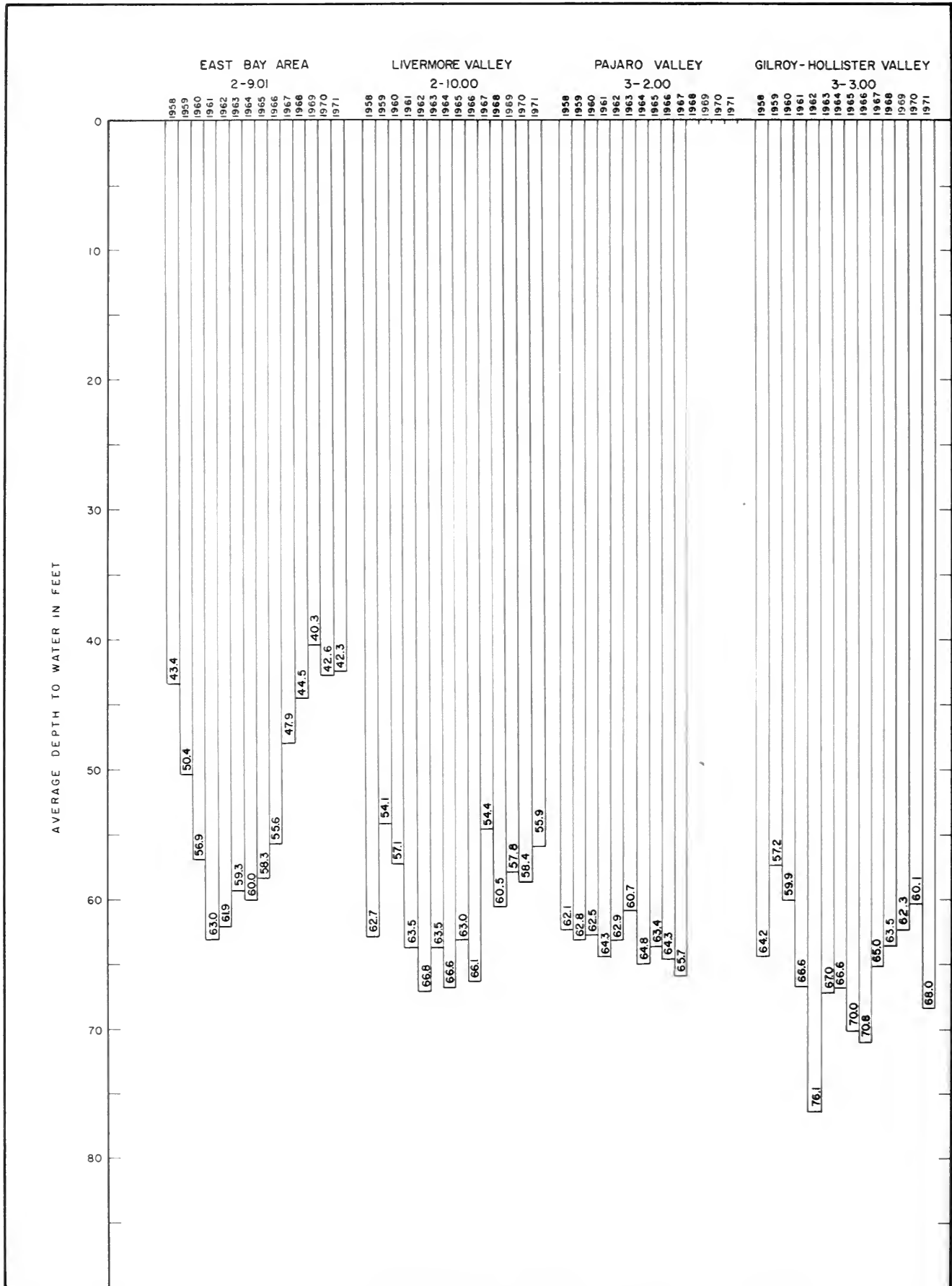
AVERAGE DEPTH TO WATER IN WELLS  
SPRING 1958 TO SPRING 1971



AVERAGE DEPTH TO WATER IN WELLS  
 SPRING 1958 TO SPRING 1971

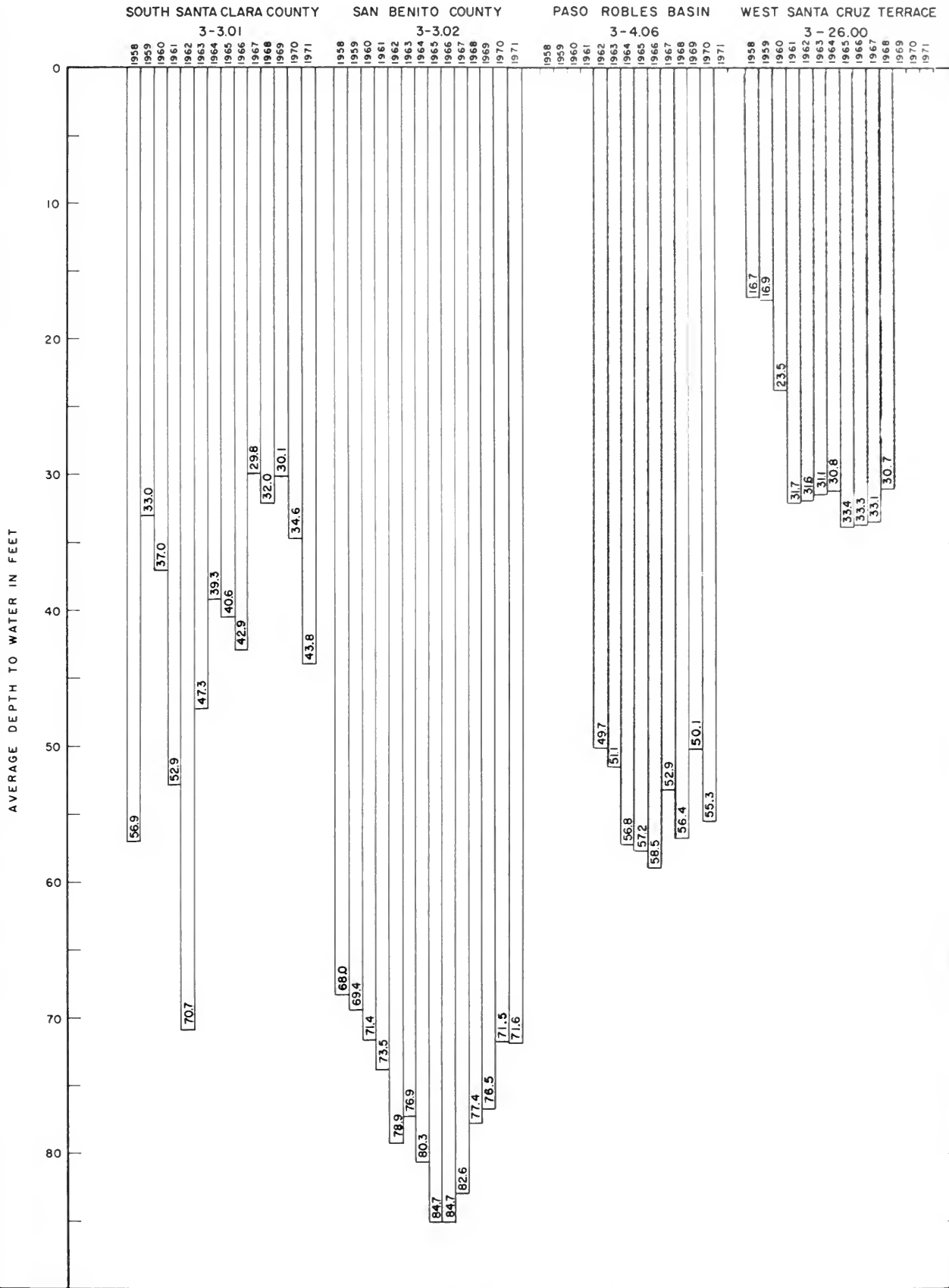


AVERAGE DEPTH TO WATER IN WELLS  
SPRING 1958 TO SPRING 1971



AVERAGE DEPTH TO WATER IN WELLS  
 SPRING 1958 TO SPRING 1971





AVERAGE DEPTH TO WATER IN WELLS  
 SPRING 1958 TO SPRING 1971

TABLE C-2 GROUND WATER LEVELS AT WELLS

An explanation of the column headings and the code symbols follows:

State Well Number - Refer to the explanation under Introduction on page 15.

Ground Surface Elevation - The numbers in this column are the elevations in feet above mean sea level (USGS Datum) of the ground surface at the well. Elevations are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date - The date shown is when the depth measurement given in the next column was made.

Ground Surface to Water Surface - This is the measured depth in feet from the ground surface to the water surface in the well; certain of the depth measurements in the column may be preceded by a number in parentheses to indicate a questionable measurement. The code applicable to these "questionable measurements" is as follows:

- |                                      |  |
|--------------------------------------|--|
| (1) Pumping                          | (6) Other                              |
| (2) Nearby pump operating            | (7) Recharge operation at or near well |
| (3) Casing leaking or wet            | (8) Oil in casing                      |
| (4) Pumped recently                  | (9) Caved or deepened                  |
| (5) Air or pressure gage measurement |  |

When a measurement was attempted, but could not be obtained, then only a number in parentheses is shown in the column. The code applicable to these "no measurements" is as follows:

- |                               |                              |
|-------------------------------|------------------------------|
| (1) Pumping                   | (6) Well has been destroyed  |
| (2) Pump house locked         | (7) Special                  |
| (3) Tape hung up              | (8) Casing leaking or wet    |
| (4) Cannot get tape in casing | (9) Temporarily inaccessible |
| (5) Unable to locate well     | (0) Measurement discontinued |

The words FLOW and DRY are shown in this column to indicate a flowing or dry well, respectively. A minus preceding the number in this column indicates that the static water level in the well is this distance in feet above the ground surface.

Water Surface Elevation - This is the elevation in feet above mean sea level (USGS Datum) of the water surface in the well. It was derived by subtraction of the depth measurement from the ground surface elevation.

Agency Supplying Data - Each number in this column is the code number for the agency supplying data for that measurement. The agencies supplying data for this report and the code numbers assigned to them are as follows:

<u>Code</u>	<u>Agency</u>
2100	Monterey County Flood Control and Water Conservation District
2400	Santa Clara County Flood Control and Water District
5000	U. S. Geological Survey
5005	Post Engineer, Fort Ord
5050	Department of Water Resources
5100	Alameda County Flood Control and Water Conservation District
5101	Napa County
5102	Santa Cruz County
5109	Solano County
5117	San Luis Obispo County Flood Control and Water Conservation District
5151	San Benito County
5200	City of Gilroy
5401	Alameda County Water District

TABLE C-2 (Cont.)

## GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION 1-00.00						SANTA ROSA AREA 1-18.01 (Continued)					
POTTER VALLEY 1-14.00						08N/09W-36P01M 90.0 10- 8-70 55.3 34.7 5050 3-10-71 50.9 39.1 5050					
17N/11W-18J01M	955.0	10-06-70 3-11-71	0.9 -0.3	954.1 955.3	5050 5050	HEALDSBURG AREA 1-18.02					
17N/11W-32J01M	905.0	10-06-70 3-11-71	4.1 2.1	900.9 902.9	5050 5050	08N/09W-03P01M 77.0 10-21-70 8.7 68.3 5000 11-16-70 4.9 72.1 5000 12-15-70 3.7 73.3 5000 1-15-71 4.1 72.9 5000 2-16-71 3.3 73.7 5000 3-15-71 5.5 71.5 5000 4-14-71 5.5 71.5 5000 5-13-71 6.4 70.6 5000 9-10-71 8.6 68.4 5000					
UKIAH VALLEY 1-15.00						08N/09W-22L01M 67.0 10-21-70 31.9 32.1 5000 11-16-70 30.6 36.4 5000 12-15-70 27.6 39.4 5000 1-15-71 28.3 38.7 5000 2-16-71 (1) 30.2 36.8 5000 3-15-71 27.9 39.1 5000 4-14-71 (1) 29.6 37.4 5000 5-13-71 (1) 29.5 37.5 5000 9-10-71 31.2 35.8 5000					
15N/12W-08L01M	640.0	10-06-70 3-11-71	28.1 19.0	611.9 621.0	5050 5050	09N/09W-20E02M 100.0 10-21-70 18.2 81.8 5000 11-16-70 16.9 83.1 5000 12-15-70 (4) 16.6 83.4 5000 1-15-71 15.5 84.5 5000 2-16-71 17.4 82.6 5000 3-15-71 15.6 84.4 5000 4-14-71 16.9 83.1 5000 5-13-71 17.6 82.4 5000 9-10-71 18.6 81.4 5000					
15N/12W-35M01M	600.0	10-06-70 3-11-71	7.9 3.2	592.1 596.8	5050 5050	09N/09W-20K04M 97.0 10-21-70 7.2 89.8 5000 11-16-70 6.1 90.9 5000 12-15-70 2.8 94.2 5000 1-15-71 1.5 95.5 5000 2-16-71 3.0 94.0 5000 3-15-71 2.5 94.5 5000 4-14-71 2.8 94.2 5000 5-13-71 4.0 93.0 5000 9-10-71 7.5 89.5 5000					
SANEL VALLEY 1-16.00						09N/09W-28N01M 90.0 10-21-70 25.9 64.1 5000 11-16-70 18.6 71.4 5000 12-15-70 17.2 72.8 5000 1-15-71 16.7 73.3 5000 2-16-71 18.2 71.8 5000 3-15-71 16.9 73.1 5000 4-14-71 18.0 72.0 5000 5-13-71 18.5 71.5 5000 9-10-71 (4) 25.5 64.5 5000					
13N/11W-18E01M	490.0	10-07-70 (1) 3-11-71	13.2 11.5	476.8 478.5	5050 5050	09N/10W-12C01M 120.0 10-21-70 15.0 105.0 5000 11-16-70 14.3 105.7 5000 12-15-70 13.5 106.5 5000 1-15-71 13.2 106.8 5000 2-16-71 14.4 105.6 5000 3-15-71 12.9 107.1 5000 4-14-71 13.7 106.3 5000 5-13-71 14.7 105.3 5000 9-10-71 15.9 104.1 5000					
13N/11W-19P01M	488.0	10-07-70 3-11-71	19.4 10.3	468.6 477.7	5050 5050	10N/10W-22D01M 180.0 10-21-70 11.6 168.4 5000 11-16-70 10.7 169.3 5000 12-15-70 (1) 8.7 171.3 5000 1-15-71 7.4 172.6 5000 2-16-71 10.0 170.0 5000 3-15-71 8.4 171.6 5000 4-14-71 (2) 9.4 170.6 5000 5-13-71 (4) 10.3 169.7 5000 9-10-71 11.8 168.2 5000					
13N/11W-20G01M	515.0	10-07-70 3-11-71	12.9 5.0	502.1 510.0	5050 5050	10N/10W-26M01M 161.0 10-21-70 13.9 147.1 5000 11-16-70 10.7 150.3 5000 12-15-70 9.2 151.8 5000 1-15-71 9.0 152.0 5000 2-16-71 10.6 150.4 5000 3-15-71 9.2 151.8 5000 4-14-71 10.1 150.9 5000 5-13-71 10.8 150.2 5000 9-10-71 13.2 147.8 5000					
ALEXANDER VALLEY 1-17.00											
10N/09W-18B01M	230.0	10-07-70 3-10-71	20.6 16.4	209.4 213.6	5050 5050						
10N/09W-26L02M	205.0	10-07-70 (1) 3-10-71	23.6 3.0	181.4 202.0	5050 5050						
10N/09W-33C01M	180.0	10-07-70 3-10-71	7.5 6.2	172.5 173.8	5050 5050						
11N/10W-08P01M	305.0	10-07-70 3-11-71	11.8 10.8	293.2 294.2	5050 5050						
11N/10W-17P02M	292.0	10-07-70 3-11-71	10.0 9.5	282.0 282.5	5050 5050						
11N/10W-19F02M	346.0	10-07-70 3-11-71	13.8 5.7	332.2 340.3	5050 5050						
SANTA ROSA VALLEY 1-18.00											
SANTA ROSA AREA 1-18.01											
06N/08W-07P02M	95.0	10-08-70 (4) 3-10-71	49.0 15.3	46.0 79.7	5050 5050						
06N/08W-13R01M	115.0	10-08-70 3-10-71	30.1 18.9	84.9 96.1	5050 5050						
06N/08W-15J03M	95.0	10-08-70 3-10-71	27.9 14.3	67.1 80.7	5050 5050						
06N/08W-15R01M	95.0	10-08-70 3-10-71	34.8 20.0	60.2 75.0	5050 5050						
07N/06W-19N01M	465.0	10-08-70 3-10-71	15.9 6.2	449.1 458.8	5050 5050						
07N/07W-06R01M	275.0	10-08-70 3-10-71	13.5 6.9	261.5 268.1	5050 5050						
07N/08W-11M01M	160.0	10-08-70 3-10-71	8.6 (6)	151.4	5050 5050						
07N/08W-24H01M	190.0	10-08-70 3-10-71	(9) 10.7		5050 5050						
07N/09W-01C01M	90.0	10-08-70 3-10-71	23.0 18.5	67.0 71.5	5050 5050						
07N/09W-35D02M	135.0	10-08-70 3-10-71	36.0 27.5	99.0 107.5	5050 5050						
08N/09W-36N01M	90.0	10-08-70 3-10-71	10.2 6.2	79.8 83.8	5050 5050						

TABLE C-2 (Cont.)

## GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
HEALDSBURG AREA 1-18.02 (Continued)						NAPA VALLEY 2-02.01 (Continued)					
10N/10W-35Q01M	142.0	10-21-70	6.1	135.9	5000	05N/04W-20R02M	50.0	3-26-71	1.2	48.8	5101
		11-16-70	5.9	136.1	5000	05N/04W-21B01M	75.0	3-26-71	16.3	58.7	5101
		12-15-70	1.0	141.0	5000	05N/04W-22M01M	12.0	3-26-71	-0.8	12.8	5101
		1-15-71	0.7	141.3	5000	05N/04W-28R01M	37.0	3-26-71	29.9	7.1	5101
		2-16-71	1.3	140.7	5000	05N/04W-29H01M	77.0	3-26-71	44.2	32.8	5101
		3-15-71	1.1	140.9	5000	06N/03W-31B01M	240.0	3-26-71	91.0	149.0	5101
		4-14-71	1.0	141.0	5000	06N/03W-31F01M	145.0	3-26-71	42.0	103.0	5101
		5-13-71	2.0	142.0	5000	06N/03W-31H01M	180.0	3-25-71	78.5	101.5	5101
		9-10-71	5.5	136.5	5000	06N/03W-31N01M	170.0	3-25-71	56.5	113.5	5101
SAN FRANCISCO BAY REGION 2-00.00						06N/03W-31N02M	167.0	3-25-71	30.0	137.0	5101
PETALUMA VALLEY 2-01.00						06N/04W-05R01M	67.0	3-25-71	4.0	63.0	5101
03N/06W-01Q01M	2.0	10-09-70	-0.3	2.3	5050	06N/04W-06L02M	80.0	3-25-71	7.5	72.5	5101
		3-09-71	-0.2	2.2	5050	06N/04W-06N01M	75.0	3-25-71	16.0	59.0	5101
05N/07W-19N01M	45.0	10-09-70	13.3	31.7	5050	06N/04W-06P01M	75.0	3-25-71	8.0	67.0	5101
		3-09-71	3.9	41.1	5050	06N/04W-07N01M	135.0	3-25-71	18.5	116.5	5101
05N/07W-20B02M	41.0	10-09-70	59.8	-18.8	5050	06N/04W-08E01M	70.0	3-24-71	7.0	63.0	5101
		3-09-71	45.8	-4.8	5050	06N/04W-15Q01M	67.0	3-25-71	43.7	23.3	5101
05N/07W-21H01M	65.0	10-09-70	38.9	26.1	5050	06N/04W-16P01M	62.0	3-26-71	7.9	54.1	5101
		3-09-71	24.3	40.7	5050	06N/04W-17A01M	67.0	10-05-70 3-09-71	13.5 6.1	53.5 60.9	5050 5050
05N/07W-26R01M	53.6	10-09-70	26.2	27.4	5050	06N/04W-18A02M	85.0	3-18-71	18.0	67.0	5101
		3-09-71	17.7	35.9	5050	06N/04W-19B01M	125.0	3-18-71	17.5	107.5	5101
05N/07W-35K01M	18.8	10-09-70	(2)		5050	06N/04W-21G01M	61.0	3-18-71	1.0	60.0	5101
		3-09-71	7.6	11.2	5050	06N/04W-22P01M	53.0	3-18-71	9.5	43.5	5101
NAPA-SONOMA VALLEY 2-02.00						06N/04W-23J01M	87.0	3-18-71	37.5	49.5	5101
NAPA VALLEY 2-02.01						06N/04W-26N01M	32.0	3-18-71	11.7	20.3	5101
04N/04W-02L01M	25.0	3-24-71	4.2	20.8	5101	06N/04W-27L02M	50.0	10-05-70 3-09-71	48.9 24.6	1.1 25.4	5050 5050
04N/04W-04C01M	12.0	3-23-71	9.7	2.3	5101	06N/04W-27N01M	50.0	3-18-71	14.5	35.5	5101
04N/04W-05B01M	31.0	3-23-71	9.4	21.6	5101	06N/04W-28R01M	62.0	3-19-71	8.1	53.9	5101
04N/04W-05D02M	22.0	3-23-71	5.2	16.8	5101	06N/04W-29B01M	92.0	3-19-71	7.3	84.7	5101
04N/04W-12M01M	48.0	3-24-71	12.6	35.4	5101	06N/04W-30C01M	149.0	3-19-71	4.9	144.1	5101
04N/04W-14C02M	34.0	3-17-71	32.0	2.0	5101	06N/04W-32J06M	94.0	3-19-71	5.0	89.0	5101
04N/04W-25K01M	37.0	3-17-71	2.0	35.0	5101	06N/04W-32L02M	107.0	3-19-71	22.5	84.5	5101
05N/03W-05M01M	255.0	3-26-71	94.5	160.5	5101	06N/04W-35G03M	38.0	3-19-71	38.9	-0.9	5101
05N/04W-03G01M	18.0	3-22-71	4.7	13.3	5101	06N/04W-36H01M	105.0	3-22-71	24.3	80.7	5101
05N/04W-04G01M	63.5	3-22-71	36.3	27.2	5101	06N/05W-12R01M	180.0	3-22-71	13.5	166.5	5101
05N/04W-04Q01M	58.0	3-22-71	11.6	46.4	5101	07N/04W-30L01M	112.0	3-17-71	3.5	108.5	5101
05N/04W-05P01M	121.0	3-23-71	3.3	117.7	5101	07N/04W-30M01M	114.0	3-17-71	0.8	113.2	5101
05N/04W-05P02M	122.0	3-22-71	12.7	109.3	5101	07N/04W-32B02M	180.0	3-17-71	3.0	177.0	5101
05N/04W-10F01M	30.0	3-23-71	2.9	27.1	5101	07N/05W-03G01M	188.0	3-22-71	35.0	153.0	5101
05N/04W-11F03M	16.0	3-23-71	8.0	8.0	5101	07N/05W-03G02M	188.0	3-31-71	13.4	174.6	5101
05N/04W-11M01M	13.0	10-05-70 3-09-71	8.5 7.5	4.5 5.5	5050 5050	07N/05W-04R02M	172.0	3-23-71	6.8	165.2	5101
05N/04W-12F01M	130.0	3-23-71	30.5	99.5	5101	07N/05W-05A01M	182.0	3-22-71	2.0	180.0	5101
05N/04W-12H01M	121.0	3-22-71	46.0	75.0	5101						
05N/04W-13H01M	132.0	3-24-71	6.3	125.7	5101						
05N/04W-13H02M	120.0	3-24-71	12.0	108.0	5101						
05N/04W-14C01M	17.0	3-24-71	12.3	4.7	5101						
05N/04W-15C02M	22.0	3-24-71	18.5	3.5	5101						
05N/04W-15E01M	22.0	3-24-71	14.6	7.4	5101						
05N/04W-19R02M	110.0	3-24-71	13.7	96.3	5101						

TABLE C-2 (Cont.)  
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NAPA VALLEY 2-02.01 (Continued)						NAPA VALLEY 2-02.01 (Continued)					
07N/05W-06F01M	245.0	3-22-71	16.0	229.0	5101	08N/06W-25G02M	230.0	3-29-71	10.6	219.4	5101
07N/05W-06J01M	215.0	3-22-71	13.5	201.5	5101	09N/06W-31Q01M	340.0	3-29-71	1.0	339.0	5101
07N/05W-08A01M	175.0	3-23-71	10.5	164.5	5101	09N/06W-32M01M	360.0	3-29-71	9.0	351.0	5101
07N/05W-08M01M	190.0	3-23-71	20.5	169.5	5101	09N/07W-24L01M	460.0	3-17-71	7.4	452.6	5101
07N/05W-09Q01M	155.0	3-22-71	9.9	145.1	5101	09N/07W-25N01M	380.0	3-31-71	3.0	377.0	5101
07N/05W-09Q02M	155.0	10-05-71 3-09-71	18.1 12.0	136.9 143.0	5050 5050	09N/07W-25N02M	380.0	3-31-71	3.5	376.5	5101
07N/05W-09Q03M	155.0	3-22-71	4.3	150.7	5101	09N/07W-26P01M	400.0	3-25-71	1.0	399.0	5101
07N/05W-10C01M	162.2	3-22-71	15.0	147.2	5101	09N/07W-35K01M	399.0	3-17-71	1.0	398.0	5101
07N/05W-14B02M	139.0	3-24-71	3.6	135.4	5101	SONOMA VALLEY 2-02.02					
07N/05W-14J01M	140.0	3-24-71	3.7	136.3	5101	05N/05W-17C01M	85.0	10-09-70 3-09-71	25.1 11.5	59.9 73.5	5050 5050
07N/05W-15A01M	143.0	3-24-71	8.4	134.6	5101	05N/05W-18R01M	43.0	10-09-70 3-09-71	13.5 3.1	29.5 39.9	5050 5050
07N/05W-15F01M	141.0	3-24-71	1.5	139.5	5101	05N/05W-28N01M	11.0	10-09-70 (1) 3-09-71 (4)	18.6 8.5	-7.6 2.5	5050 5050
07N/05W-16L01M	171.0	3-24-71	3.2	167.8	5101	05N/05W-29N01M	16.0	10-09-70 3-09-71	(1) (8)		5050 5050
07N/05W-16N02M	193.0	3-24-71	12.7	180.3	5101	05N/05W-30J03M	16.0	10-09-70 3-09-71	14.8 6.9	1.2 9.1	5050 5050
07N/05W-17B02M	161.0	3-17-71	-0.1	161.1	5101	SUISUN-FAIRFIELD VALLEY 2-03.00					
07N/05W-21G01M	152.0	3-17-71	-1.0	153.0	5101	04N/02W-04D02M	26.0	10-26-70 3-17-71	10.1 8.4	15.9 17.6	5109 5109
07N/05W-22E03M	140.0	3-29-71	3.0	137.0	5101	04N/02W-06A01M	35.0	10-16-70 10-26-70 11-16-70 12-15-70 1-15-71 3-02-71 3-18-71 3-30-71 4-28-71 5-25-71 6-24-71 7-30-71 8-31-71 9-28-71	13.7 11.7 14.7 13.1 (9) 12.8 12.5 12.0 12.5 12.9 13.1 13.3 13.5 (9)	21.3 23.3 20.3 21.9 5050 5050 5109 5050 5050 22.1 21.9 21.7 21.5 5050	5050 5109 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050
07N/05W-22H01M	133.0	3-27-71	10.5	122.5	5101	04N/02W-07D01M	17.0	10-26-70 3-17-71	9.7 2.3	7.3 14.7	5109 5109
07N/05W-23D02M	127.0	3-27-71	6.5	120.5	5101	04N/02W-09A01M	7.0	10-16-70 10-26-70 11-16-70 12-15-70 1-15-71 3-02-71 3-17-71 3-30-71 4-28-71 5-26-71 6-24-71 7-30-71 8-31-71 9-28-71	0.7 FLOW 0.3 FLOW FLOW FLOW FLOW FLOW -0.5 -0.2 0.3 0.5 0.5 0.6	6.3 6.7 5050 5050 5050 5050 5109 5050 5050 7.5 7.2 6.7 6.5 6.5 6.4	5050 5109 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050
07N/05W-23Q01M	115.0	3-27-71	3.9	111.1	5101	04N/02W-09H01M	4.0	10-16-70 11-16-70 12-15-70 1-15-71 3-02-71 3-30-71 4-28-71 5-26-71 6-24-71 7-30-71 8-31-71 9-28-71	(1) 0.3 FLOW -0.4 (1) 1.1 (1) 4.1 (1) (1) (1) (1) 0.4	3.7 4.4 0.8 -0.1 0.8 0.8 3.6	5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050
07N/05W-24P01M	127.0	3-27-71	1.2	125.8	5101						
07N/05W-25A01M	163.0	3-27-71	8.0	155.0	5101						
07N/05W-26D02M	127.0	3-25-71	5.0	122.0	5101						
07N/05W-34C02M	190.0	3-25-71	3.4	186.6	5101						
07N/05W-35F02M	175.0	3-30-71	3.2	171.8	5101						
07N/05W-36N01M	141.0	3-30-71	4.5	136.5	5101						
07N/06W-01A01M	264.0	3-30-71	12.3	251.7	5101						
08N/05W-30P01M	220.0	3-17-71	0.7	219.3	5101						
08N/05W-31H01M	212.0	3-22-71	9.2	202.8	5101						
08N/05W-31P02M	237.0	3-25-71	(7)		5101						
08N/05W-31R01M	210.0	3-17-71	6.8	203.2	5101						
08N/05W-32K04M	192.0	3-25-71	6.0	186.0	5101						
08N/06W-03M01M	330.0	3-17-71	33.0	297.0	5101						
08N/06W-04F01M	330.0	3-23-71	65.0	265.0	5101						
08N/06W-06L04M	335.0	3-23-71	8.0	327.0	5101						
08N/06W-09D02M	290.0	3-24-71	12.0	278.0	5101						
08N/06W-09H01M	290.0	3-23-71	1.5	288.5	5101						
08N/06W-09H02M	291.5	3-30-71	2.5	289.0	5101						
08N/06W-10Q01M	290.0	10-05-70 3-09-71	7.2 2.4	282.8 287.6	5050 5050						
08N/06W-14N01M	285.0	3-31-71	10.6	274.4	5101						
08N/06W-14Q01M	250.0	3-23-71	7.5	242.5	5101						
08N/06W-23M01M	285.0	3-17-71	3.4	281.6	5101						
08N/06W-24B01M	300.0	3-17-71	9.5	290.5	5101						

TABLE C-2 (Cont.)

## GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SUISUN-FAIRFIELD VALLEY 2-03.00 (Continued)						PITTSBURG PLAIN 2-04.00					
04N/03W-01D01M	37.0	10-26-70 3-17-71	7.7 2.8	29.3 34.2	5109 5109	02N/01E-15N01M	40.0	10-19-70 3-08-71	34.2 33.0	5.8 7.0	5050 5050
04N/03W-13G01M	47.0	10-26-70 3-17-71	19.3 18.1	27.7 28.9	5109 5109	02N/01E-15P01M	35.0	10-19-70 3-08-71	21.0 19.9	14.0 15.1	5050 5050
05N/01E-19R01M	39.0	10-27-70 3-17-71	11.1 5.5	27.9 33.5	5109 5109	02N/01E-18D01M	25.0	10-19-70 3-08-71	24.9 21.4	0.1 3.6	5050 5050
05N/01W-02N01M	88.5	10-26-70 3-17-71	9.5 7.9	79.0 80.6	5109 5109	02N/01W-04Q01M	5.0	10-19-70 3-08-71	4.4 (9)	0.6	5050 5050
05N/01W-07E01M	115.0	10-26-70 3-17-71	14.6 12.7	100.4 102.3	5109 5109	02N/01W-11L01M	30.0	10-19-70 3-08-71	30.4 30.1	-0.4 -0.1	5050 5050
05N/01W-25R01M	25.0	10-27-70 3-17-71	9.8 6.2	15.2 18.8	5109 5109	02N/01W-12P01M	30.0	10-19-70 3-08-71	27.7 27.4	2.3 2.6	5050 5050
05N/02W-08G03M	143.0	10-26-70 3-18-71	12.6 9.5	130.4 133.5	5109 5109	YGNACIO VALLEY 2-06.00					
05N/02W-14N03M	100.0	10-26-70	(6)		5109	01N/01W-07K01M	83.0	10-19-70 3-08-71	11.8 10.4	71.2 72.6	5050 5050
05N/02W-21P03M	60.0	10-16-70 10-26-70 11-16-70 12-15-70 1-15-71 3-02-71 3-18-71 3-30-71 4-28-71 5-25-71 6-24-71 7-30-71 8-31-71 9-28-71	12.0 10.9 12.1 10.2 8.2 8.8 9.0 9.2 9.6 9.1 8.4 8.9 9.8 10.8	48.0 49.1 47.9 49.8 51.8 51.2 51.0 50.8 50.4 50.9 51.6 51.1 50.2 49.2	5050 5109 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050 5050	SANTA CLARA VALLEY 2-09.00					
05N/02W-25R01M	7.0	10-16-70 10-26-70 11-16-70 12-15-70 1-15-71 3-02-71 3-17-71 3-30-71 4-28-71 5-26-71 6-24-71 7-30-71 8-31-71 9-28-71	5.3 4.6 4.9 0.5 0.3 2.7 1.4 1.7 3.8 4.4 4.9 5.4 5.8 5.6	1.7 2.4 2.1 6.5 6.7 4.3 5.6 5.3 3.2 2.6 2.1 1.6 1.2 1.4	5050 5109 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050 5050	EAST BAY AREA ABOVE HAYWARD FAULT 2-09.01					
05N/02W-27J02M	24.0	10-16-70 10-26-70 11-16-70 12-15-70 1-15-71 3-04-71 3-17-71 (2) 3-30-71 (2) 4-28-71 5-26-71 (2) 6-24-71 7-30-71 8-31-71 9-28-71	7.9 5.7 5.8 (8) (8) 6.5 30.0 31.9 5.6 25.6 5.9 (8) 6.2 7.1	16.1 18.3 18.2 17.5 -6.0 -7.9 18.4 -1.6 18.1 17.8 16.9	5050 5109 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050 5050 5050	04S/01W-35P03M	115.3	11-05-70 12-01-70 1-05-71 2-02-71 3-29-71 5-04-71 6-04-71 6-28-71 8-02-71 8-30-71 9-27-71	136.9 135.3 136.8 137.3 138.5 140.2 142.0 144.0 145.1 145.9 146.5	-21.6 -20.0 -21.5 -22.0 -23.2 -24.9 -26.7 -28.7 -29.8 -30.6 -31.2	5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401
05N/02W-29R01M	46.0	10-26-70 3-18-71 (1)	13.2 15.2	32.8 30.8	5109 5109	EAST BAY AREA UPPER AQUIFER 2-09.01					
05N/02W-30J01M	65.0	10-16-70 11-16-70 12-15-70 1-15-71 3-02-71 3-30-71 4-28-71 5-25-71 6-24-71 7-30-71 8-31-71 9-28-71	20.7 22.2 18.3 17.1 20.1 20.7 21.2 15.0 (1) 16.9 18.2 19.3	44.3 42.8 46.7 47.9 44.9 44.3 43.8 50.0 48.1 46.8 45.7	5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050	03S/02W-08M03M	48.0	10-08-70 11-04-70 12-02-70 12-30-70 1-27-71 2-24-71 3-24-71 4-21-71 5-19-71 6-16-71 7-14-71 8-11-71 9-08-71 (1)	19.7 17.9 16.4 15.2 15.0 15.4 14.7 16.0 17.2 17.1 17.0 17.5 18.5	28.3 30.1 31.6 32.8 33.0 32.6 33.3 32.0 30.8 30.9 31.0 30.5 29.5	5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100
						03S/02W-08R05M	64.0	10-00-70 4-00-71 9-00-71	31.5 30.1 31.5	32.5 33.9 32.5	5100 5100 5100
						03S/02W-19J01M	30.0	10-08-70 11-04-70 12-02-70 12-30-70 1-27-71 2-24-71 3-24-71 4-21-71 5-19-71 6-16-71 7-14-71 8-11-71 9-08-71	9.9 8.8 9.0 8.1 8.1 8.6 7.8 9.7 8.7 8.9 9.3 9.6 10.2	20.1 21.2 21.0 21.9 21.9 21.4 22.2 20.3 21.3 21.1 20.7 20.4 19.8	5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100

TABLE C-2 (Cont.)

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA				
EAST BAY UPPER AQUIFER 2-09.01 (Continued)						SOUTH BAY AREA 2-09.02 (Continued)									
03S/03W-24Q02M	7.0	10-00-70	(1) 9.1	-2.1	5100	06S/01E-30M01M	43.0	1-06-71	46.6	-3.6	2400				
		4-00-71	(1) 8.9	-1.9	5100			2-19-71	40.4	2.6	2400				
		9-00-71	8.9	-1.9	5100			3-15-71	41.1	1.9	2400				
04S/01W-18H03M	47.0	11-03-70	63.1	-16.1	5401	5-13-71	59.6	-16.6	2400						
		12-01-70	61.0	-14.0	5401	6-15-71	(1)	2400							
		1-05-71	57.5	-10.5	5401	7-14-71	82.7	-39.7	2400						
		2-01-71	56.0	-9.0	5401	8-11-71	85.8	-42.8	2400						
		3-29-71	55.5	-8.5	5401	9-13-71	84.8	-41.8	2400						
		5-03-71	55.2	-8.2	5401	06S/02W-16R01M	48.0	1-07-71	73.2	-25.2	2400				
		6-02-71	57.1	-10.1	5401			2-22-71	70.0	-22.0	2400				
		6-29-71	58.3	-11.3	5401			3-18-71	68.9	-20.9	2400				
		7-28-71	59.3	-12.3	5401			4-16-71	71.6	-23.6	2400				
		9-02-71	60.7	-13.7	5401			5-13-71	75.1	-27.1	2400				
9-28-71	61.9	-14.9	5401	6-17-71	76.2			-28.2	2400						
04S/01W-22P05M	80.0	10-00-70	47.2	32.8	5100			7-19-71	73.7	-25.7	2400				
		4-00-71	40.0	40.0	5100			8-16-71	78.8	-30.8	2400				
		9-00-71	59.6	20.4	5100			9-15-71	73.8	-25.8	2400				
04S/02W-13C02M	36.4	3-29-71	40.9	-4.5	5401			06S/02W-25C01M	73.0	10-07-70	102.1	-29.1	2400		
		9-28-71	44.8	-8.4	5401	3-18-71	90.4			-17.4	2400				
04S/02W-24Q02M	33.4	10-00-70	45.1	-11.7	5100	4-19-71	90.0			-17.0	2400				
		4-00-71	42.6	-9.2	5100	5-14-71	89.6			-16.6	2400				
		9-00-71	44.4	-11.0	5100	6-17-71	92.3			-19.3	2400				
EAST BAY AREA LOWER AQUIFER 2-09.01		02S/03W-36R01M	45.0	10-00-70	(1) 180.5	-135.5	5100			7-19-71	93.1	-20.1	2400		
				4-00-71	(1) 178.0	-133.0	5100			8-17-71	94.0	-21.0	2400		
				9-00-71	77.5	-32.5	5100			9-16-71	94.0	-21.0	2400		
		03S/03W-24J01M	11.0	10-08-70	69.5	-58.5	5100			07S/01E-01K01M	179.0	1-18-71	126.8	52.2	2400
				11-04-70	58.0	-47.0	5100					3-10-71	124.3	54.7	2400
				12-02-70	55.0	-44.0	5100	4-12-71	124.0			55.0	2400		
				12-30-70	55.0	-44.0	5100	5-10-71	123.1			55.9	2400		
				1-27-71	51.7	-40.7	5100	6-09-71	122.3			56.7	2400		
				2-24-71	51.0	-40.0	5100	7-08-71	120.5			58.5	2400		
				3-24-71	49.1	-38.1	5100	8-06-71	119.5			59.5	2400		
4-21-71	49.9			-38.9	5100	9-08-71	117.5	61.5	2400						
5-19-71	50.4			-39.4	5100	07S/01E-31A02M	151.6	10-01-70	143.4			8.2	2400		
6-16-71	52.6			-41.6	5100			10-29-70	146.3			5.3	2400		
7-14-71	53.3			-42.3	5100			11-30-70	129.3	22.3	2400				
8-11-71	58.4			-47.4	5100			12-30-70	120.4	31.2	2400				
9-08-71	67.2			-56.2	5100			2-01-71	112.2	39.4	2400				
03S/03W-36R03M	5.0	10-00-70	66.8	-61.8	5100			3-01-71	110.9	40.7	2400				
		4-00-71	55.0	-50.0	5100			3-30-71	110.3	41.3	2400				
		9-00-71	63.9	-58.9	5100			4-29-71	112.0	39.6	2400				
04S/02W-02Q01M	26.0	3-22-71	55.4	-29.4	5401			6-02-71	111.7	39.9	2400				
		3-26-71	31.1	-16.1	5401			7-01-71	114.8	36.8	2400				
SOUTH BAY AREA 2-09.02		06S/01E-21R01M	138.0	10-05-70	164.7	-26.7	2400	7-29-71	128.7	22.9	2400				
				11-01-70	156.0	-18.0	2400	8-31-71	133.6	18.0	2400				
				11-30-70	151.9	-13.9	2400	9-30-71	135.1	16.5	2400				
		12-29-70	144.8	-6.8	2400	07S/02E-07P01M	130.0	1-12-71	91.8	38.2	2400				
		2-01-71	148.4	-10.4	2400			3-08-71	85.6	44.4	2400				
		3-02-71	148.8	-10.8	2400			4-09-71	79.7	50.3	2400				
		4-01-71	134.5	3.5	2400			5-07-71	80.0	50.0	2400				
		4-30-71	132.8	5.2	2400			6-08-71	87.3	42.7	2400				
		5-28-71	142.8	-4.8	2400			7-08-71	80.2	49.8	2400				
		6-30-71	147.2	-9.2	2400			8-09-71	79.8	50.2	2400				
7-29-71	156.7	-18.7	2400	9-08-71	79.6			50.4	2400						
8-31-71	161.0	-23.0	2400	07S/02E-17H01M	349.0			3-09-71	96.7	252.3	2400				
06S/01E-23P02M	240.5	11-02-70	123.3					117.2	2400	5-07-71	98.0	251.0	2400		
		11-30-70	126.8			113.7	2400	6-08-71	(1)	2400					
		12-29-70	125.5			115.0	2400	7-08-71	88.8	260.2	2400				
		2-01-71	122.5			118.0	2400	8-06-71	(2) 89.2	259.8	2400				
		3-02-71	123.0			117.5	2400	9-08-71	89.5	259.5	2400				
		4-01-71	123.2			117.3	2400	07S/02E-33C01M	462.0	1-12-71	18.1	443.9	2400		
		4-30-71	124.6			115.9	2400			3-09-71	19.0	443.0	2400		
		5-28-71	124.6			115.9	2400			4-12-71	18.1	443.9	2400		
		6-30-71	124.7			115.8	2400			5-07-71	18.0	444.0	2400		
		7-29-71	125.9	114.6	2400	6-08-71	18.2			443.8	2400				
8-30-71	126.0	114.5	2400	7-07-71	17.8	444.2	2400								
06S/01E-23P02M	240.5	11-02-70	123.3	117.2	2400	8-06-71	18.8			443.2	2400				
		11-30-70	126.8	113.7	2400	9-08-71	19.2			442.8	2400				
		12-29-70	125.5	115.0	2400	07S/02W-04B01M	218.0			10-07-70	215.4	2.6	2400		
		2-01-71	122.5	118.0	2400					1-08-71	227.8	-9.8	2400		
		3-02-71	123.0	117.5	2400			2-26-71	201.1	16.9	2400				
		4-01-71	123.2	117.3	2400			3-18-71	206.2	11.8	2400				
		4-30-71	124.6	115.9	2400			4-19-71	(6) 222.7	-4.7	2400				
		5-28-71	124.6	115.9	2400			5-14-71	(6) 223.9	-5.9	2400				
		6-30-71	124.7	115.8	2400			6-17-71	(6) 225.3	-7.3	2400				
		7-29-71	125.9	114.6	2400			7-29-71	(6) 225.9	-7.9	2400				
8-30-71	126.0	114.5	2400	8-31-71	(6) 227.4			-9.4	2400						
								9-30-71	(6) 228.0	-10.0	2400				

TABLE C-2 (Cont.)

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA		
SOUTH BAY AREA 2-09.02 (Continued)						LIVERMORE VALLEY 2-10.00 (Continued)							
07S/02W-22A01M	340.0	10-15-70	26.8	313.2	2400	02S/01W-22K01M	440.0	10-00-70	20.4	419.6	5100		
		2-08-71	25.1	314.9	2400			4-00-71	14.3	425.7	5100		
		3-19-71	25.4	314.6	2400			9-00-71	17.7	422.3	5100		
		4-21-71	26.4	313.6	2400			02S/01W-26C01M	416.9	10-00-70	38.2	378.7	5100
		5-17-71	26.6	313.4	2400					4-00-71	29.4	387.5	5100
		6-18-71	25.4	314.6	2400					9-00-71	32.4	384.5	5100
		7-19-71	26.0	314.0	2400			03S/01E-01G02M	418.0	10-00-70	50.2	367.8	5100
		8-17-71	26.9	313.1	2400					4-00-71	26.1	391.9	5100
		9-16-71	26.6	313.4	2400					9-00-71	48.3	369.7	5100
08S/02E-20F03M	209.0	11-24-70	24.6	184.4	2400	03S/01E-02J01M	408.0	10-00-70	50.8	357.2	5100		
		2-22-71	21.2	187.8	2400			4-00-71	49.8	358.2	5100		
		3-29-71	27.5	181.5	2400			9-00-71	50.3	357.7	5100		
		4-29-71	28.6	180.4	2400	03S/01E-03J01M	361.0	10-00-70	22.4	338.6	5100		
		5-26-71	26.6	182.4	2400			4-00-71	22.3	338.7	5100		
		6-25-71	27.6	181.4	2400			9-00-71	23.5	337.5	5100		
		8-25-71	27.6	181.4	2400	03S/01E-05M01M	333.7	10-00-70	6.0	327.7	5100		
08S/02E-22D01M	239.7	11-24-70	11.4	228.3	2400			4-00-71	5.5	328.2	5100		
		2-22-71	23.4	216.3	2400			9-00-71	14.7	319.0	5100		
		3-29-71	16.6	223.1	2400			03S/01E-05R02M	340.0	10-00-70 (1)	79.8	260.2	5100
		4-29-71	11.2	228.5	2400					4-00-71	77.1	262.9	5100
		5-26-71	11.2	228.5	2400					9-00-71	94.6	245.4	5100
		6-25-71	11.5	228.2	2400	03S/01E-06C01M	334.7	10-00-70	25.6	309.1	5100		
8-25-71	11.4	228.3	2400	4-00-71	22.5			312.2	5100				
09S/02E-01J01M	314.6	11-04-70	31.2	283.4	2400			9-00-71	26.7	308.0	5100		
		11-30-70	31.8	282.8	2400			03S/01E-08J02M	339.6	10-14-70	87.2	252.4	5100
		12-31-70	29.6	285.0	2400					11-25-70	85.0	254.6	5100
		1-29-71	30.2	284.4	2400					12-09-70	82.9	256.7	5100
		2-26-71	33.3	281.3	2400	1-06-71	80.1			259.5	5100		
		3-31-71	30.3	284.3	2400	2-03-71	77.4			262.2	5100		
4-30-71	32.7	281.9	2400	3-03-71	82.0	257.6	5100						
6-01-71	37.8	276.8	2400	4-14-71	73.0	266.6	5100						
7-02-71 (2)	41.4	273.2	2400	4-28-71	71.8	267.8	5100						
7-30-71	41.7	272.9	2400	6-09-71	76.2	263.4	5100						
8-30-71	36.3	278.3	2400	7-07-71	80.1	259.5	5100						
09S/02E-02J02M	287.6	12-10-70	18.3	269.3	2400	8-04-71	84.8	254.8	5100				
		3-03-71	18.2	269.4	2400	9-01-71	85.0	254.6	5100				
		4-02-71	19.2	268.4	2400	03S/01E-09R02M	353.2	10-14-70	139.5	213.7	5100		
		5-03-71	19.2	268.4	2400			3-03-71	95.2	258.0	5100		
		6-01-71	22.0	265.6	2400			03S/01E-10Q02M	368.7	10-14-70	135.0	233.7	5100
		7-02-71	25.6	262.0	2400	3-03-71	107.0			261.7	5100		
		8-02-71	26.6	261.0	2400	03S/01E-11H01M	372.9			10-00-70	138.0	234.9	5100
		9-01-71 (4)	28.2	259.4	2400			4-00-71	120.3	252.6	5100		
		10-00-70	30.7	309.3	5100			9-00-71	144.5	228.4	5100		
LIVERMORE VALLEY 2-10.00	02S/01E-31E01M	340.0	4-00-71	17.1	322.9	5100	03S/01E-12P01M	404.0	10-00-70 (1)	195.3	208.7	5100	
			9-00-71	28.2	311.8	5100			4-00-71	150.0	254.0	5100	
			9-00-71	28.2	311.8	5100			9-00-71	168.9	235.1	5100	
02S/02E-21F01M	580.0	10-00-70	50.6	529.4	5100	03S/01E-13P01M	396.5	10-00-70 (1)	148.6	247.9	5100		
		4-00-71	45.5	534.5	5100			4-00-71	138.4	258.1	5100		
		9-00-71	48.5	531.5	5100			9-00-71	139.9	256.6	5100		
02S/02E-22N02M	545.0	10-00-70	24.6	520.4	5100	03S/01E-14F01M	379.2	10-00-70	72.4	306.8	5100		
		4-00-71	24.1	520.9	5100			4-00-71	69.7	309.5	5100		
		9-00-71	24.7	520.3	5100			9-00-71	90.1	289.1	5100		
02S/02E-27K01M	520.0	10-00-70	11.1	508.9	5100	03S/01E-15L01M	363.0	10-00-70 (1)	127.5	235.5	5100		
		4-00-71	8.7	511.3	5100			4-00-71	80.7	282.3	5100		
		9-00-71	11.3	508.7	5100			9-00-71	106.4	256.6	5100		
02S/02E-28J01M	520.0	10-00-70	7.8	512.2	5100	03S/01E-16D02M	339.4	10-14-70	104.2	235.2	5100		
		4-00-71	6.8	513.2	5100			11-25-70	99.2	240.2	5100		
		9-00-71	24.1	495.9	5100			12-09-70	97.5	241.9	5100		
02S/02E-29A02M	552.0	10-00-70	(0)		5100			1-06-71	92.4	247.0	5100		
		10-00-70	31.4	520.6	5100			2-03-71	85.8	253.6	5100		
		4-00-71	29.0	523.0	5100			3-03-71	81.2	258.2	5100		
9-00-71 (1)	30.9	521.1	5100	4-14-71	80.0	259.4	5100						
02S/02E-29A03M	552.0	10-00-70	24.7	495.3	5100	4-28-71	78.2	261.2	5100				
		4-00-71	23.9	496.1	5100	6-09-71	84.0	255.4	5100				
		9-00-71	(7)		5100	7-07-71	88.3	251.1	5100				
02S/02E-32C01M	520.0	10-00-70	14.6	507.4	5100	8-04-71	91.0	248.4	5100				
		4-00-71	12.2	509.8	5100	9-01-71	93.7	245.7	5100				
		9-00-71	13.5	508.5	5100								
02S/02E-35F01M	522.0	10-00-70	28.0	505.0	5100								
		4-00-71	27.0	506.0	5100								
		9-00-71	26.2	506.8	5100								
02S/02E-36F01M	533.0	10-00-70	28.0	505.0	5100								
		4-00-71	27.0	506.0	5100								
		9-00-71	26.2	506.8	5100								



TABLE C-2 (Cont.)

## GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LIVERMORE VALLEY 2-10.00 (Continued)						LIVERMORE VALLEY 2-10.00 (Continued)					
03S/01E-16D06M	339.4	10-14-70	110.7	228.7	5100	03S/02E-06P01M	414.0	10-00-70	41.0	373.0	5100
		11-25-70	99.0	240.4	5100			4-00-71	37.0	377.0	5100
		12-09-70	98.2	241.2	5100			9-00-71	36.5	377.5	5100
		1-06-71	89.4	250.0	5100	03S/02E-07P02M	440.0	10-00-70	111.6	328.4	5100
		2-03-71	84.5	254.9	5100			4-00-71	97.6	342.4	5100
		3-03-71	81.3	258.1	5100			9-00-71	112.1	327.9	5100
		4-14-71	81.2	258.2	5100	03S/02E-08H01M	472.5	10-00-70	134.0	338.5	5100
		4-28-71	81.9	257.5	5100			4-00-71	71.8	400.7	5100
		6-09-71	88.7	250.7	5100			9-00-71	88.0	384.5	5100
		7-07-71	96.2	243.2	5100	03S/02E-08P02M	465.0	10-14-70	84.0	381.0	5100
		8-04-71	100.7	238.7	5100			3-03-71	67.5	397.5	5100
		9-01-71	104.6	234.8	5100	03S/02E-09Q01M	518.0	10-00-70	154.0	364.0	5100
03S/01E-16D07M	339.4	10-14-70	115.3	224.1	5100			4-00-71	93.0	425.0	5100
		11-25-70	101.3	238.1	5100			9-00-71	125.6	392.4	5100
		12-09-70	101.3	238.1	5100	03S/02E-11R03M	600.0	10-00-70	120.0	480.0	5100
		1-06-71	90.6	248.8	5100			4-00-71	114.0	486.0	5100
		2-03-71	85.3	254.1	5100			9-00-71	113.7	486.3	5100
		3-03-71	82.6	256.8	5100	03S/02E-11R04M	600.0	10-00-70	87.4	512.6	5100
		4-14-71	83.1	256.3	5100			4-00-71	(0)	5100	5100
		4-28-71	82.3	257.1	5100	03S/02E-14Q01M	649.0	10-00-70	10.5	638.5	5100
		6-09-71	93.6	245.8	5100			4-00-71	7.4	641.6	5100
		7-07-71	101.2	238.2	5100			9-00-71	12.4	636.6	5100
		8-04-71	104.4	235.0	5100	03S/02E-15B04M	549.0	10-00-70	56.6	492.4	5100
		9-01-71	109.3	230.1	5100			4-00-71	41.7	507.3	5100
03S/01E-16R01M	358.0	10-00-70	126.3	231.7	5100			9-00-71	53.3	495.7	5100
		4-00-71	68.5	289.5	5100	03S/02E-15R01M	599.0	10-00-70	13.0	586.0	5100
		9-00-71	97.4	260.6	5100			4-00-71	7.8	591.2	5100
03S/01E-18A01M	320.0	10-14-70	72.0	248.0	5100			9-00-71	15.8	583.2	5100
		11-25-70	84.0	236.0	5100	03S/02E-16E02M	508.0	10-14-70	98.8	409.2	5100
		12-09-70 (1)	78.0	242.0	5100			11-25-70	92.4	415.6	5100
		1-06-71	91.0	229.0	5100			12-09-70	97.9	410.1	5100
		2-03-71	64.0	256.0	5100			1-06-71	92.4	415.6	5100
		3-03-71	64.0	256.0	5100			2-03-71	93.1	414.9	5100
		4-14-71 (1)	66.0	254.0	5100			3-03-71	92.7	415.3	5100
		4-28-71	62.0	258.0	5100			4-14-71	92.9	415.1	5100
		6-09-71	69.0	251.0	5100			4-28-71	91.9	416.1	5100
		7-07-71	72.0	248.0	5100			6-09-71 (1)	111.7	396.3	5100
		8-04-71	70.0	250.0	5100			7-07-71 (1)	121.4	386.6	5100
		9-01-71	69.6	250.4	5100			8-04-71 (1)	99.5	408.5	5100
03S/01E-18M05M	320.0	10-00-70	86.7	233.3	5100			9-01-71	93.7	414.3	5100
		4-00-71	76.2	243.8	5100	03S/02E-16N01M	530.0	10-00-70	145.6	384.4	5100
		9-00-71	71.3	248.7	5100			4-00-71	144.8	385.2	5100
03S/01E-19A03M	328.0	10-14-70	83.2	244.8	5100			9-00-71	127.2	402.8	5100
		11-25-70	85.7	242.3	5100	03S/02E-19D01M	411.6	10-14-70	183.0	228.6	5100
		12-09-70	84.5	243.5	5100			11-25-70	171.4	240.2	5100
		1-06-71	70.7	257.3	5100			12-09-70	165.3	246.3	5100
		2-03-71	66.1	261.9	5100			1-06-71	157.2	254.4	5100
		3-03-71	71.4	256.6	5100			2-03-71	151.0	260.6	5100
		4-14-71	74.5	253.5	5100			3-03-71	146.7	264.9	5100
		4-28-71	74.9	253.1	5100			4-14-71	143.2	268.4	5100
		6-09-71	68.6	259.4	5100			4-28-71	143.2	268.4	5100
		7-07-71	70.8	257.2	5100			6-09-71	145.5	266.1	5100
		8-04-71	75.4	252.6	5100			7-07-71	153.0	258.6	5100
		9-01-71	75.4	252.6	5100			8-04-71	163.8	247.8	5100
03S/01E-20B02M	340.0	10-14-70 (1)	108.0	232.0	5100			9-01-71	174.0	237.6	5100
		3-03-71	77.5	262.5	5100	03S/02E-19H03M	460.0	10-00-70	95.0	365.0	5100
03S/01E-23J01M	435.0	10-00-70 (1)	91.0	344.0	5100			4-00-71	94.9	365.1	5100
		4-00-71	76.0	359.0	5100			9-00-71	96.9	363.1	5100
		9-00-71	79.0	356.0	5100	03S/02E-22H02M	620.0	10-00-70	41.3	578.7	5100
03S/01E-24R01M	421.9	10-00-70	18.0	403.9	5100			4-00-71	20.0	600.0	5100
		4-00-71	15.0	406.9	5100			9-00-71	26.2	593.8	5100
		9-00-71	18.7	403.2	5100	03S/02E-22M01M	605.0	10-00-70	154.5	450.5	5100
03S/01E-29E03M	311.0	10-00-70	47.2	263.8	5100			4-00-71	149.5	455.5	5100
		4-00-71	46.0	265.0	5100			9-00-71	145.1	459.9	5100
		9-00-71	46.9	264.1	5100	03S/02E-26J01M	720.0	10-00-70	26.5	693.5	5100
03S/02E-01G01M	580.0	10-00-70	87.7	492.3	5100			4-00-71	19.5	700.5	5100
		4-00-71	81.5	498.5	5100			9-00-71	23.5	696.5	5100
		9-00-71	79.7	500.3	5100	03S/02E-28P01M	505.0	10-00-70	18.0	487.0	5100
03S/02E-03K01M	520.2	10-00-70	51.2	469.0	5100			4-00-71	17.0	488.0	5100
		4-00-71	48.2	472.0	5100			9-00-71	17.0	488.0	5100
		9-00-71	51.7	468.5	5100						
03S/02E-03P01M	545.0	10-00-70	69.3	475.7	5100						
		4-00-71	53.3	491.7	5100						
		9-00-71	64.3	480.7	5100						

TABLE C-2 (Cont.)  
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LIVERMORE VALLEY 2-10.00 (Continued)						PAJARO VALLEY 3-02.00 (Continued)					
03S/02E-29D01M	466.4	10-00-70	62.9	403.5	5100	13S/02E 06E03M	34.4	11-19-70	29.8	4.6	2100
		4-00-71	56.1	410.3	5100			1-00-71	26.0	8.4	2100
		9-00-71	68.4	398.0	5100			2-00-71	26.0	8.4	2100
								3-00-71	26.3	8.1	2100
03S/02E-29F01M	476.6	10-00-70	9.5	467.1	5100	GILROY-HOLLISTER VALLEY 3-03.00					
		4-00-71	9.6	467.0	5100	SOUTH SANTA CLARA COUNTY 3-03.01					
		9-00-71	12.3	464.3	5100	09S/03E-16J01M	385.7	9-08-70	87.6	298.1	2400
03S/03E-07M02M	625.0	10-00-70	52.7	572.3	5100			3-05-71	41.6	344.1	2400
		4-00-71	52.2	572.8	5100	09S/03E-21K02M	361.6	10-09-70	55.4	306.2	2400
		9-00-71	50.4	574.6	5100			3-05-71	54.7	306.9	2400
03S/03E-17N01M	860.0	10-00-70	45.0	815.0	5100	09S/03E-22B03M	379.1	9-01-70	80.4	298.7	2400
		4-00-71	33.4	826.6	5100			3-31-71	78.5	300.6	2400
		9-00-71	43.6	816.4	5100	09S/03E-23E01M	362.5	9-04-70	97.6	264.9	2400
03S/03E-19D01M	712.0	10-00-70	(7)		5100			3-05-71	73.6	288.9	2400
		4-00-71	(7)		5100	09S/03E-26P01M	329.1	10-05-70	61.9	267.2	2400
		9-00-71	32.6	679.4	5100			4-06-71	46.2	282.9	2400
03S/01W-01B01M	332.0	10-00-70	42.0	290.0	5100	09S/03E-29B01M	397.6	10-16-70	13.4	384.2	5050
		4-00-71	30.3	301.7	5100			5-03-71	9.3	388.3	5050
		9-00-71	50.0	282.0	5100	09S/03E-34Q01M	314.2	10-05-70	38.1	276.1	2400
03S/01W-02A01M	370.0	10-00-70	40.0	330.0	5100			3-05-71	25.2	289.0	2400
		4-00-71	27.2	342.8	5100	09S/03E-36F03M	322.0	9-04-70	86.5	235.5	2400
		9-00-71	35.0	335.0	5100			3-05-71	67.3	254.7	2400
03S/01W-02R01M	380.0	10-00-70	13.8	366.2	5100	10S/03E-02K03M	290.0	10-16-70	51.2	238.8	5050
		4-00-71	12.8	367.2	5100			5-03-71	34.2	255.8	5050
		9-00-71	15.3	364.7	5100	10S/03E-13J03M	251.0	10-15-70	56.9	194.1	5050
03S/01W-12G03M	320.0	10-00-70	14.4	305.6	5100			5-03-71	32.9	218.1	5050
		4-00-71	7.9	312.1	5100	10S/03E-36E03M	220.0	10-16-70	(7)		5050
CENTRAL COASTAL REGION 3-00.00								5-03-71	(7)		5050
PAJARO VALLEY 3-02.00						10S/04E-18C02M	259.5	10-15-70	58.4	201.1	5050
11S/02E-27A01M	141.0	10-16-70	107.5	33.5	5050			5-03-71	42.4	217.1	5050
		5-04-71	127.5	13.5	5050	10S/04E-35E01M	248.0	10-16-70	(9)		5050
12S/01E-24G01M	9.4	10-16-70	(1)		5050			5-03-71	90.5	157.5	5050
		5-04-71	16.8	-7.4	5050	11S/04E-08K02M	179.0	10-16-70	29.7	149.3	5050
12S/02E-11E04M	36.0	10-16-70	31.2	4.8	5050			5-03-71	(1)		5050
		5-04-71	26.2	9.8	5050	SAN BENITO COUNTY 3-03.02					
12S/02E-16J01M	20.5	10-16-70	21.7	-1.2	5050	11S/05E-13D01M	255.7	10-15-70	22.8	232.9	5050
		5-04-71	19.7	0.8	5050			5-03-71	21.8	233.9	5050
12S/02E-31K01M	30.0	11-20-70	30.2	-0.2	2100	12S/04E-20C01M	152.9	3-00-71	29.5	123.4	5151
13S/01E-01A01M	5.0	11-19-70	3.7	1.3	2100	12S/05E-10R01M	211.6	10-15-70	78.8	132.8	5050
13S/02E-06B01M	15.0	10-16-70	(9)		5050			5-03-71	74.6	137.0	5050
		5-04-71	(9)		5050	12S/05E-12M04M	215.0	10-15-70	76.4	138.6	5050
13S/02E-06C01M	26.0	10-00-70	(1)		2100			5-03-71	67.9	147.1	5050
		11-00-70	24.2	1.8	2100	12S/05E-33A02M	280.0	10-15-70	78.0	202.0	5050
		12-00-70	(7)		2100			5-03-71	76.0	204.0	5050
		1-00-71	21.2	4.8	2100	12S/05E-35N02M	303.0	10-15-70	96.4	206.6	5050
		2-00-71	21.1	4.9	2100			5-03-71	111.4	191.6	5050
		3-00-71	(1)		2100	13S/05E-11Q01M	325.5	3-00-71	27.1	298.4	5151
		4-00-71	21.2	4.8	2100	SALINAS VALLEY 3-04.00					
		5-00-71	23.0	3.0	2100	PRESSURE AREA 180-FOOT AQUIFER 3-04.01					
		6-00-71	23.9	2.1	2100	14S/02E-03C01M	10.6	11-20-70	17.7	-7.1	2100
		7-00-71	24.3	1.7	2100						
		8-00-71	(1)		2100	15S/02E-01Q01M	42.0	1-00-71	35.0	7.0	2100
		9-00-71	27.0	-1.0	2100			2-00-71	33.2	8.8	2100
13S/02E-06E02M	27.8	10-00-70	(1)		2100			3-00-71	31.0	11.0	2100
		11-00-70	24.0	3.8	2100			7-00-71	62.7	-20.7	2100
		12-00-70	(7)		2100						
		1-00-71	22.0	5.8	2100						
		2-00-71	21.7	6.1	2100						
		3-00-71	20.8	7.0	2100						
		4-00-71	21.3	6.5	2100						
		5-00-71	25.4	2.4	2100						
		6-00-71	25.9	1.9	2100						
		7-00-71	30.1	-2.3	2100						
		8-00-71	(1)		2100						
		9-00-71	(1)		2100						

TABLE C-2 (Cont.)  
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PRESSURE AREA 180-FOOT AQUIFER 3-04.01 (Continued)						UPPER VALLEY AREA 3-04.05 (Continued)					
15S/03E-16M01M	58.0	10-00-70	53.0	5.0	2100	21S/09E-07J02M	364.0	10-00-70	24.0	340.0	2100
		11-00-70	(7)		2100			11-00-70	23.9	340.1	2100
		12-03-70	40.0	18.0	2100			1-00-71	23.6	340.4	2100
		1-00-71	31.5	26.5	2100			2-00-71	23.7	340.3	2100
		2-00-71	34.4	23.6	2100			3-00-71	22.0	342.0	2100
		3-00-71	35.5	22.5	2100			4-00-71	(1)		2100
		4-00-71	54.3	3.7	2100			6-00-71	24.0	340.0	2100
		5-00-71	55.7	2.3	2100			8-00-71	(1)		2100
		6-00-71	57.9	0.1	2100			9-00-71	25.0	339.0	2100
		7-00-71	68.0	-10.0	2100						
8-00-71	67.0	-9.0	2100	21S/10E-32N01M	400.0	11-19-70	23.0	377.0	2100		
9-00-71	64.0	-6.0	2100								
15S/04E-33A01M	125.0	12-10-70	(4)		2100	22S/10E-16K01M	472.0	11-19-70	71.4	400.6	2100
16S/04E-11D01M	110.0	11-24-70	(4)		2100	PASO ROBLES BASIN 3-04.06					
PRESSURE AREA 400-FOOT AQUIFER 3-04.01						24S/11E-25N01M	603.3	2-01-71	36.8	566.5	5117
13S/02E-31Q01M	11.0	11-20-70	15.8	-4.8	2100			4-19-71	36.8	566.5	5117
						24S/11E-33R01M	565.0	2-01-71	31.0	534.0	5117
14S/03E-18J01M	69.0	10-00-70	86.8	-17.8	2100			4-19-71	31.0	534.0	5117
		11-27-70	77.0	-8.0	2100	24S/11E-35D01M	572.1	12-01-70	31.0	541.1	5117
		12-00-70	(7)		2100			4-19-71	31.0	541.1	5117
		1-00-71	67.0	2.0	2100	24S/11E-35J01M	616.8	4-19-71	59.8	557.0	5117
		2-00-71	67.3	1.7	2100	24S/15E-27L01M	1211.5	11-12-70	21.4	1190.1	5117
		3-00-71	70.0	-1.0	2100			4-02-71	16.5	1195.0	5117
		4-00-71	72.2	-3.2	2100	24S/15E-33C02M	1225.0	11-12-70	25.0	1200.0	5117
		5-00-71	(1)		2100			4-21-71	22.6	1202.4	5117
		6-00-71	96.0	-27.0	2100	25S/11E-35C01M	895.0	10-27-70	65.0	830.0	5117
		7-00-71	(7)		2100			4-16-71	58.5	836.5	5117
8-00-71	101.6	-32.6	2100	25S/11E-36N02M	837.5	10-27-70	47.0	790.5	5117		
9-00-71	98.8	-29.8	2100			4-16-71	42.5	795.0	5117		
EAST SIDE AREA 3-04.02						25S/12E-17J01M	640.0	10-28-70	21.0	619.0	5117
16S/05E-17R01M	181.0	11-22-70	107.5	73.5	2100			4-16-71	2.0	638.0	5117
						25S/12E-17R01M	640.0	10-28-70	39.0	601.0	5117
ARROYO SECO CONE 3-04.04								4-16-71	10.0	630.0	5117
18S/06E-15M01M	277.0	10-00-70	94.0	183.0	2100	25S/12E-26K01M	749.0	4-21-71	114.0	635.0	5117
		11-00-70	99.5	177.5	2100			5-25-71	128.0	621.0	5117
		2-00-71	88.0	189.0	2100			8-24-71	192.1	556.9	5117
		3-00-71	89.9	187.1	2100	25S/12E-28N01M	639.0	10-30-70	22.5	616.5	5117
		4-00-71	(1)		2100			4-21-71	12.4	626.6	5117
		5-00-71	90.9	186.1	2100	25S/13E-11E01M	1185.0	10-30-70	56.1	1128.9	5117
		6-00-71	95.9	181.1	2100			4-21-71	(4)		5117
		7-00-71	99.1	177.9	2100	25S/13E-19R01M	915.0	10-30-70	174.7	740.3	5117
		8-00-71	(1)		2100			4-02-71	176.2	738.8	5117
		9-00-71	103.0	174.0	2100	25S/16E-17L01M	1164.5	11-12-70	27.3	1137.2	5117
19S/06E-11C01M	373.0	10-00-70	188.0	185.0	2100			4-21-71	27.2	1137.3	5117
		11-00-70	177.0	196.0	2100	26S/12E-04N01M	675.0	10-24-70	45.9	629.1	5117
		1-00-71	156.6	216.4	2100			4-16-71	42.7	632.3	5117
		2-00-71	155.5	217.5	2100	26S/12E-26E01M	840.0	10-30-70	195.0	645.0	5117
		3-00-71	(1)		2100			4-16-71	191.5	648.5	5117
		4-00-71	(1)		2100	26S/13E-05F01M	740.0	10-30-70	(1)		5117
		5-00-71	151.1	221.9	2100			4-21-71	15.5	724.5	5117
		6-00-71	(1)		2100	26S/13E-10D01M	800.0	10-30-70	74.0	726.0	5117
		7-00-71	158.5	214.5	2100			4-21-71	56.4	743.6	5117
		8-00-71	183.6	189.4	2100	26S/14E-17L01M	949.0	10-30-70	36.0	913.0	5117
9-00-71	186.0	187.0	2100			4-07-71	40.6	908.4	5117		
UPPER VALLEY AREA 3-04.05						26S/14E-18Q01M	930.0	10-30-70	46.4	883.6	5117
19S/07E-10P01M	315.0	10-00-70	81.5	233.5	2100			4-07-71	32.5	897.5	5117
		11-00-70	82.5	232.5	2100	26S/14E-24B01M	1000.0	11-17-70	157.0	843.0	5117
		1-00-71	78.2	236.8	2100			4-07-71	67.5	932.5	5117
		2-00-71	80.8	234.2	2100	26S/14E-35D01M	1135.0	11-19-70	117.5	1017.5	5117
		3-00-71	81.0	234.0	2100			4-23-71	116.5	1018.5	5117
		4-00-71	90.4	224.6	2100						
		5-00-71	87.6	227.4	2100						
		6-00-71	91.4	223.6	2100						
		7-00-71	95.0	220.0	2100						
		8-00-71	96.7	218.3	2100						
9-00-71	93.5	221.5	2100								
20S/08E-05R03M	337.0	1-00-71	67.4	269.6	2100						
		2-00-71	67.0	270.0	2100						
		3-00-71	(1)		2100						
		4-00-71	70.4	266.6	2100						

TABLE C-2 (Cont.)

## GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PASO ROBLES BASIN 3-04.06 (Continued)						CARMEL VALLEY 3-07.00					
26S/15E-16P02M	1047.0	11-12-70 4-07-71	31.5 50.2	1015.5 996.8	5117 5117	16S/01E-16L01M	75.0	10-00-70 12-00-70 2-00-71 3-00-71 4-00-71 5-00-71 6-00-71 7-00-71 8-00-71 9-00-71	18.3 19.3 17.4 17.3 18.7 21.0 18.3 23.7 (1) 19.2	56.7 55.7 57.6 57.7 56.3 54.0 56.7 51.3 2100 55.8	2100 2100 2100 2100 2100 2100 2100 2100 2100
26S/15E-21P01M	1072.0	11-17-70 2-18-71 4-02-71 5-02-71 7-16-71	47.0 36.4 56.0 67.0 70.0	1025.0 1035.6 1016.0 1005.0 1002.0	5117 5117 5117 5117 5117	16S/01E-22E01M	82.0	2-00-71 3-00-71 4-00-71 5-00-71 6-00-71 7-00-71 8-00-71 9-00-71	27.1 26.7 28.2 (1) 27.5 28.3 29.5 30.0	54.9 55.3 53.8 2100 54.5 53.7 52.5 52.0	2100 2100 2100 2100 2100 2100 2100
26S/15E-28Q01M	1090.0	10-23-70 11-17-70	78.0 61.0	1012.0 1029.0	5117 5117	16S/01E-23F01M	109.0	10-00-70 12-00-70 2-00-71 3-00-71 4-00-71 5-00-71 6-00-71 7-00-71 8-00-71 9-00-71	29.0 30.3 27.3 27.7 27.4 25.8 27.2 26.7 30.1 34.1	80.0 78.7 81.7 81.3 81.6 83.2 81.8 82.3 78.9 74.9	2100 2100 2100 2100 2100 2100 2100 2100 2100
26S/15E-29N01M	1133.0	12-10-70 1-20-71 2-23-71 4-23-71 7-16-71 8-25-71	84.0 78.0 76.5 90.0 122.0 126.9	1049.0 1055.0 1056.5 1043.0 1011.0 1006.1	5117 5117 5117 5117 5117 5117	16S/01E-25B01M	140.0	10-00-70 12-00-70 2-00-71 3-00-71 4-00-71 5-00-71 6-00-71 7-00-71 8-00-71 9-00-71	16.5 18.5 16.8 16.7 16.6 17.0 17.0 (1) (1)	123.5 121.5 123.2 123.3 123.4 123.0 123.0 2100 2100	2100 2100 2100 2100 2100 2100 2100 2100
27S/12E-04F04M	701.0	10-27-70	19.8	681.2	5117						
27S/12E-21C01M	741.0	10-27-70	16.4	724.6	5117						
27S/13E-24N01M	1030.0	1-20-71 2-23-71 4-22-71	16.5 15.6 43.0	1013.5 1014.4 987.0	5117 5117 5117						
27S/13E-33L01M	1180.0	11-19-70 1-20-71 2-23-71 8-25-71	134.0 108.0 107.0 107.5	1046.0 1072.0 1073.0 1072.5	5117 5117 5117 5117						
27S/15E-03E01M	1120.0	11-17-70 1-20-71 2-18-71 4-22-71 5-23-71 7-16-71 8-25-71	62.2 58.1 57.2 72.7 75.8 110.2 96.7	1057.8 1061.9 1062.8 1047.3 1044.2 1009.8 1023.3	5117 5117 5117 5117 5117 5117 5117						
27S/15E-10R02M	1130.0	4-23-71	(1)		5117						
27S/16E-07P01M	1225.0	11-17-70 4-26-71	66.0 63.0	1159.0 1162.0	5117 5117						
27S/16E-35Q01M	1281.0	11-17-70 4-26-71	13.0 12.0	1268.0 1269.0	5117 5117						
28S/12E-25R01M	877.0	10-26-70 4-13-71	21.3 11.0	855.7 866.0	5117 5117						
28S/13E-04K01M	1199.5	11-19-70 4-22-71	54.8 46.5	1144.7 1153.0	5117 5117						
28S/13E-04K02M	1195.0	11-19-70 4-22-71	116.0 80.1	1079.0 1114.9	5117 5117						
28S/13E-31K01M	884.8	10-26-70 4-13-71	25.0 4.0	859.8 880.8	5117 5117						
28S/16E-23M01M	1440.0	11-17-70 4-26-71	33.7 31.7	1406.3 1408.3	5117 5117						
29S/13E-05F03M	915.6	10-26-70 4-13-71	17.6 13.5	898.0 902.1	5117 5117						
29S/13E-05K02M	928.5	10-26-70 4-13-71	15.0 17.8	913.5 910.7	5117 5117						
29S/13E-06A01M	920.0	10-26-70 4-13-71	64.0 40.0	856.0 880.0	5117 5117						
29S/13E-08M01M	945.0	10-26-70	11.5	933.5	5117						
29S/13E-19H01M	1002.1	10-26-70 4-12-71	16.5 7.5	985.6 994.6	5117 5117						
SEASIDE AREA 3-04.08											
14S/02E-31M01M	119.9	10-09-70 4-18-71 5-18-71	131.8 123.5 125.5	-11.9 -3.6 -5.6	5005 5005 5005						
15S/01E-14N01M	144.6	10-09-70 4-18-71 5-18-71	128.1 120.6 126.0	16.5 24.0 18.6	5005 5005 5005						

Appendix D: SURFACE WATER QUALITY



## INTRODUCTION

This appendix contains surface water quality data collected from October 1, 1970, through September 30, 1971. The data were collected from 74 stream and estuarine stations in the Central Coastal Area by the U. S. Bureau of Reclamation, the U. S. Geological Survey, Santa Cruz County, and the Department of Water Resources. Only those stations from which data are collected routinely are shown on Figure D-1. The U. S. Bureau of Reclamation data were collected for its Delta-San Luis Drainage Surveillance Program and are basically confined to the Sacramento-San Joaquin Delta and Suisun Bay, the latter being included in this report.

The Department of Water Resources Laboratory uses procedures from "Standard Methods for the Examination of Water and Wastewater", 13th Edition, 1971, for the determination of mineral, nutrient, and biological constituents. Pesticides are determined in accordance with the "Guide to the Analysis of Pesticide Residues", U. S. Department of Health, Education and Welfare, 1965.

The U. S. Air Force at McClellan Air Force Base provides laboratory services for the Bureau of Reclamation. It uses procedures in accordance with the "FWPCA Methods for Chemical Analysis of Water and Wastes", November 1968, for all parameters.

Two numbering systems are used in this bulletin for identifying water quality stations. The first is for those stations for which the flow of water can be measured readily, as in streams and rivers. This system is described in Department of Water Resources Bulletin No. 157, "Index of Stream Gaging Stations in and Adjacent to California, 1970".

The second numbering system is used for those stations located in broad water bodies. This system is described as follows: The first two digits identify the hydrographic area as shown on the next page. The third digit identifies the type of water body, and for this publication is a "B" for Bay, "D" for Delta, "O" for Ocean, and "S" for Slough. The next digit is the last digit of the latitude in degrees, "3" for 33°, or "9" for 29°. The next three digits are the minutes of latitude to the tenth of a minute. The last four digits are longitude in the same manner as latitude.

Example: E0 B 807.3 145.6

E0	San Francisco Bay
B	Water Body -- Bay
8	28° Latitude
07.3	07.3 Minutes Latitude
1	121° Longitude
45.6	45.6 Minutes Longitude



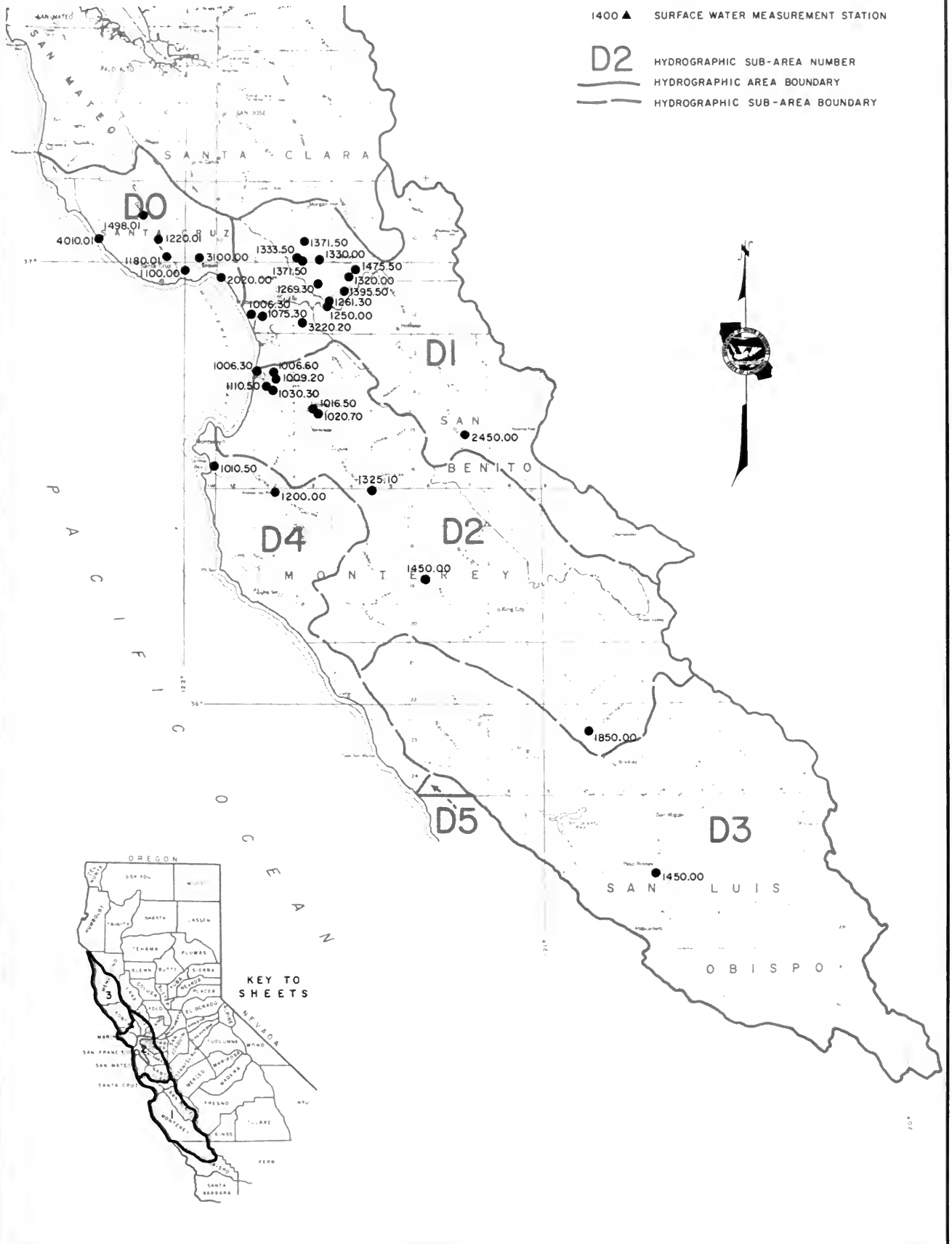


LEGEND

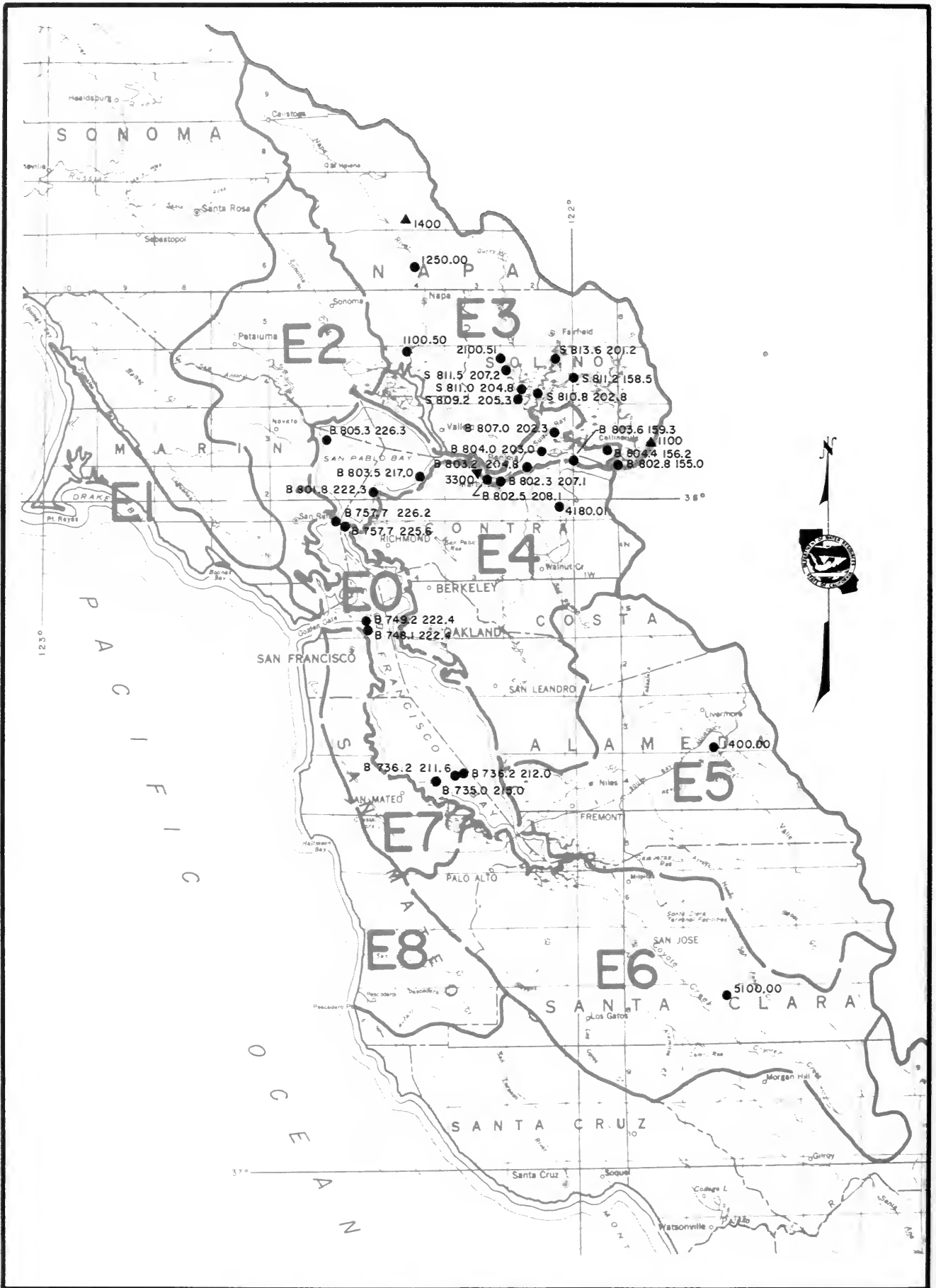
B 736.2 211.6 ● SURFACE WATER QUALITY SAMPLING STATION

1400 ▲ SURFACE WATER MEASUREMENT STATION

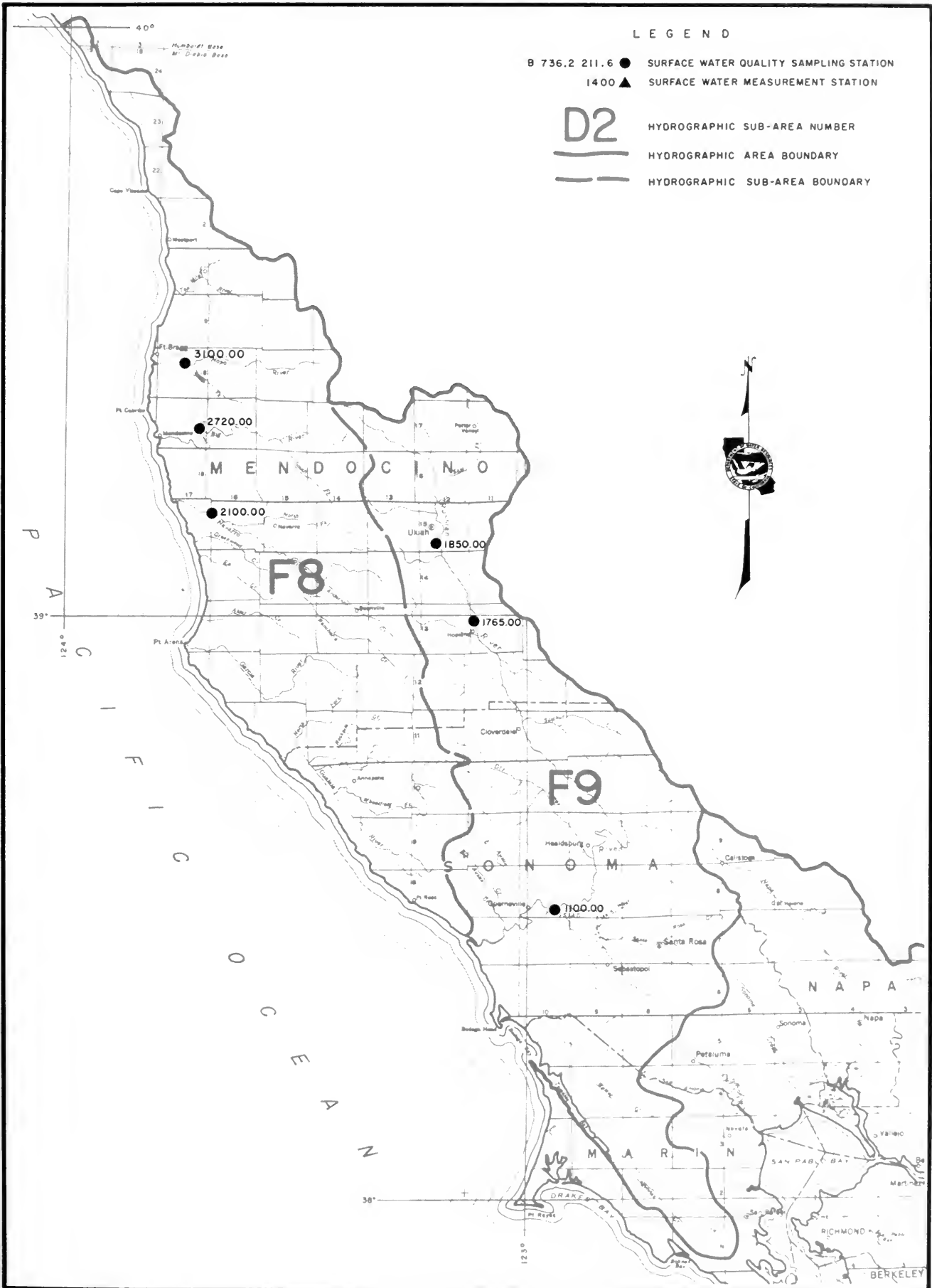
**D2**  
 ——— HYDROGRAPHIC AREA BOUNDARY  
 - - - - - HYDROGRAPHIC SUB-AREA BOUNDARY



SURFACE WATER OBSERVATION STATIONS 1970-71



SURFACE WATER OBSERVATION STATIONS 1970-71



SURFACE WATER OBSERVATION STATIONS 1970-71

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

Lab and Sampler Agency Codes

- 5000 - U. S. Geological Survey
- 5001 - U. S. Bureau of Reclamation
- 5006 - McClellan Air Force Base Laboratory
- 5050 - Department of Water Resources
- 5063 - Santa Cruz County Health Department

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
  - G.H. - Instantaneous gage height in feet above an established datum
  - Q - Instantaneous discharge measured in cubic feet per second
  - DEPTH - Depth at which sample was collected
  - DO - Dissolved oxygen content in milligrams per liter
  - SAT - Percent of normal dissolved oxygen saturation
  - TEMP - Water temperature in degrees Fahrenheit (F) and Celsius (C)
  - PH - Measure of acidity or alkalinity of water
  - EC - Electrical conductance in micromhos at 25° C
  - TDS - Gravimetric determination of total dissolved solids at 180° C
  - SUM - Total dissolved solids by summation of analyzed constituents
  - TH - Total hardness
  - NCH - Noncarbonate hardness - any excess of total hardness over total alkalinity
  - TURB - Jackson Turbidity Units measured with a Hellige Turbidimeter (E) or a Hach Nephelometer (A)
  - SAR - Sodium adsorption ratio
- PERCENT REACTANCE VALUE is determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

Mineral Constituents

- |      |   |             |      |   |           |
|------|---|-------------|------|---|-----------|
| B    | - | Boron       | K    | - | Potassium |
| CA   | - | Calcium     | MG   | - | Magnesium |
| CL   | - | Chloride    | NA   | - | Sodium    |
| CO3  | - | Carbonate   | NO3  | - | Nitrate   |
| F    | - | Fluoride    | SI02 | - | Silica    |
| HCO3 | - | Bicarbonate | SO4  | - | Sulfate   |

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER							
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TOS SUM	TH NCH	TURB SAR		
		00	1100.00	BRANCIFORTE CREEK		AT SANTA CRUZ															
03/15/71 1530	5063 5050		10.5 98	54 12	F C	7.5 7.7	273 262	1.10 42	7.8 24	17 28	--	.0 .00	71 1.16	--	17 .48	3.1 .05	--	--	173	87 29	30E 0.8
05/18/71 1300	5063		10.0 102	62.0F 16.7C		7.8	422	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/27/71 1230	5063 5050		9.5 92	57.0F 13.9C	8.0 8.1	485 469	44 2.20 47	15 1.24 26	30 1.31 28	--	.0 .00	186 3.05	--	29 .82	1.9 .03	--	--	283	172 20	30E 1.0	
		00	1180.01	SAN LORENZO RIVER		AT PARADISE PARK															
10/06/70 0950	5063		10.5 104	59 15	F C	7.8	320	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/19/70 1330	5063		13.0 122	55 13	F C	7.9	325	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/05/70 1115	5063		10.0 96	57 14	F C	7.8	321	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/16/70 1045	5063		12.5 109	49 9	F C	7.9	355	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/30/70 1035	5063		10.5 95	52 11	F C	8.0	245	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/14/70 1120	5063		13.5 115	47 8	F C	7.6	317	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/22/70 1120	5063		12.0 106	50 10	F C	7.7	222	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/11/71 1105	5063		11.5 99	48 9	F C	7.8	298	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/25/71 1100	5063		13.5 116	48 9	F C	7.9	340	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/08/71 1413	5063		13.5 118	49 9	F C	7.8	355	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/23/71 1320	5063		12.0 106	50 10	F C	8.3	357	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/71 1305	5063		13.0 113	49 9	F C	8.0	368	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/15/71 1200	5063 5050		10.5 95	52 11	F C	7.8 7.8	289 297	32 1.60 53	7.6 .63 21	16 .70 23	--	.0 .00	100 1.64 55	--	14 .39 13	.6 .01	--	--	180	111 30	35E 0.7
04/01/71 1000	5063		10.5 90	48 9	F C	8.0	329	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/12/71 1010	5063		12.0 110	53 12	F C	8.1	349	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/27/71 1230	5063		11.5 111	57 14	F C	8.2	358	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/10/71 0935	5063		11.5 110	56 13	F C	7.9	362	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/18/71 1220	5063		11.5 120	64.0F 17.8C	8.1	355	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/25/71 0945	5063		11.0 107	58 14	F C	7.9	355	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/07/71 1130	5063		11.5 119	63 17	F C	8.1	372	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/23/71 1130	5063		11.0 119	67 19	F C	8.0	372	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/12/71 1400	5063		11.0 125	72 22	F C	8.2	365	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/26/71 1310	5063		10.0 112	70 21	F C	8.2	360	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/09/71 1420	5063		10.0 116	74 23	F C	8.2	357	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER						
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR			
		D0 1180.01	SAN LORENZO RIVER AT PARADISE PARK										CONTINUED									
08/26/71 1445	5063		9.5 109	73 23	F C	8.3 350	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/13/71 1215	5063		11.0 120	68 20	F C	8.1 360	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/27/71 1010	5063 5050		10.5 98	54.0F 12.2C	7.9 8.0	350 354	38 1.90	9.7 .80	19 .83	--	.0 .00	132 2.16	--	24 .68	1.1 .02	--	--	218	135 27	3E 0.7		
		D0 1220.01	ZAYANTE CREEK AT FELTON																			
03/15/71 1110	5063 5050		12.0 107	51 11	F C	7.7 7.9	372 367	40 2.00	9.7 .80	20 .87	--	.0 .00	119 1.95	--	4.0 .11	1.2 .02	--	--	223	140 43	550E 0.7	
05/18/71 1050	5063		10.5 100	56.0F 13.3C	7.7	380	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/27/71 0940	5063 5050		10.0 91	52.0F 11.1C	7.8 8.1	380 3770	43 2.15	7.9 .65	25 1.09	--	.0 .00	126 2.07	--	26 .73	1.9 .03	--	--	244	140 37	2E 0.9		
		D0 1498.01	SAN LORENZO RIVER AT BOULDER CREEK																			
03/15/71 1000	5063 5050	2.22 3.5	10.5 89	47 8	F C	7.6 7.8	315 306	32 1.60	1.2 .10	17 .74	--	.0 .00	98 1.61	--	14 .39	.4 .01	--	--	184	85 5	80E 0.8	
05/18/71 1000	5063		10.5 101	57.0F 13.9C	7.9	393	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/27/71 0900	5063 5050		9.0 84	54.0F 12.2C	7.8 8.1	520 514	50 2.50	14 1.18	35 1.52	--	.0 .00	184 3.02	--	46 1.30	.7 .01	--	--	296	184 33	15E 1.1		
		D0 2020.00	APTOS CREEK BELOW VALENCIA CREEK AT APTOS																			
03/15/71 1350	5063 5050	3.24 5.3	10.5 96	53 12	F C	8.1 8.3	555 550	49 2.45	23 1.91	39 1.70	--	.0 .00	208 3.41	--	25 .71	.4 .01	--	--	346	218 48	100E 1.2	
05/18/71 1400	5063		9.5 96	61.0F 16.1C	8.2	660	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/27/71 1350	5063 5050		9.0 87	57.0F 13.9C	8.3 8.4	670 863	70 3.49	33 2.72	66 2.87	--	5.0 .17	306 5.02	--	74 2.09	.4 .01	--	--	533	311 51	2E 1.6		
		D0 3100.00	SOQUEL CREEK AT SOQUEL																			
03/15/71 1430	5063 5050	2.86 35	10.5 102	58 14	F C	8.1 8.1	538 525	56 2.79	16 1.37	31 1.35	--	.0 .00	174 2.85	--	26 .73	.3 .00	--	--	334	208 66	12E 0.9	
05/18/71 1330	5063		2.62 120	10.5 22.2C	8.2	675	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/27/71 1300	5063 5050	2.48	10.0 107	66.0F 18.9C	8.4 8.5	710 705	70 3.49	25 2.06	44 1.91	--	6.0 .20	224 3.67	--	58 1.64	.1 .00	--	--	457	278 84	1E 1.1		
		D0 4010.01	SCOTT CREEK AT HIGHWAY 1 NEAR DAVENPORT																			
03/15/71 0900	5063 5050		11.0 95	48 9	F C	7.1 7.5	173 212	14 .70	4.9 .40	19 .83	--	.0 .00	58 .95	--	23 .65	.2 .00	--	--	124	55 8	15E 1.1	
05/18/71 0830	5063		10.0 91	52.0F 11.1C	7.1	420	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/27/71 0750	5063 5050		8.0 73	53.0F 11.7C	7.4 7.8	1150 611	18 .90	12 1.00	78 3.39	--	.0 .00	114 1.87	--	101 2.85	.2 .00	--	--	349	95 2	2E 3.5		
		D1 1250.00	PAJARO RIVER AT CHITTENDEN																			
11/05/70 0815	5050 5050	2.34	8.0 79	59.0F 15.0C	8.0 8.0	1510 1650	--	--	171 7.44	--	.0 .00	557 9.13	--	185 5.22	--	1.00	--	--	--	554		
01/07/71 1045	5050 5050	3.12	12.0 98	44.0F 6.7C	8.1 8.0	1000 1000	--	--	83 3.61	--	.0 .00	303 4.97	--	80 2.26	--	.50	--	--	--	377		
03/04/71 1230	5050 5050	2.66	12.1 118	58 14	F C	7.6 7.7	1200 1230	84 4.19	67 5.51	95 4.13	2.1 .05	.0 .00	396 6.49	212 4.41	94 2.65	30.0 .48	.50	--	800 779	486 161	1.9	
05/11/71 0810	5050 5050	2.72	7.9 79	60 16	F C	8.0 8.3	1100 1310	82 4.09	71 5.90	117 5.09	--	.0 .00	419 6.87	--	100 2.82	26.0 .42	--	--	--	500 156	2.3	
07/08/71 1100	5050 5050	2.36	9.6 107	70 21	F C	8.2 8.8	1100 1310	74 3.69	64 5.26	132 5.74	2.8 .07	29 .97	389 6.38	192 4.00	109 3.07	8.5 .14	.60	--	844 803	440 80	2.7	



TABLE D-2 (CONTINUED)  
 MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN	MILLIGRAMS PER LITER					MILLIGRAMS PER LITER									
							CA	MG	NA	K	CO3	PERCENT HC03	REACTANCE 504	PER LITER CL	NO3	8 SI02	F S04	TD5 SUM	TH NCH	TURB SAR	
		D3 1450.00	SALINAS RIVER AT PASO ROBLES																		
03/04/71 1820	5050 5050		10.8 20	54 100	F C	7.8 8.1	575 819	82 4.09 45	31 2.55 28	53 2.31 26	1.6 0.04 .00	.0 0.00	276 4.52 51	130 2.71 30	59 1.66 19	.9 .01	.00 --	-- --	495 493	331 106	1.3
		D4 1200.00	CARMEL RIVER AT ROBLES DEL RIO																		
03/04/71 0945	5050 5050	3.38	9.9 92	54 12	F C	7.5 7.7	400 592	56 2.79 46	18 1.48 24	41 1.78 29	2.7 .07 1	.0 0.00	178 2.92 48	88 1.83 30	47 1.33 22	.0 .00	.00 --	-- --	355 340	215 68	1.2
07/08/71 0700	5050 5050	3.04	6.9 66	56 13	F C	7.2 7.9	350 583	56 2.79 47	17 1.40 24	39 1.70 29	2.0 .05 1	.0 0.00	176 2.88 49	86 1.79 31	41 1.16 20	.0 .00	.00 --	-- --	353 328	212 66	1.2
		E0 B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE SHIP CHANNEL																		
03/16/71 1020	5050 5050		9.4 86	53 12	F C	8.0	37000 32200	--	--	--	--	--	--	--	13500 380.70 136	--	--	--	24400		30E
04/13/71 0920	5050 5050		9.3 91	58 14	F C	8.1	36000 33700	--	--	--	--	--	--	--	13100 369.42 126	--	--	3.2	24000		15E
06/23/71 0810	5050 5050		7.5 79	65 18	F C	8.3	39000 36400	--	--	--	--	--	--	--	14400 406.08 128	--	--	--	29200		6E
07/08/71 0820	5050 5050		8.4 91	67 19	F C	8.2	40000 38100	--	--	--	--	--	--	--	14800 417.36 126	--	--	--	29900		4E
08/10/71 1030	5050 5050		6.9 77	70 21	F C	8.0	39500	--	--	--	--	--	--	--	15900 448.38 131	--	--	--	30400		8E
09/21/71 0915	5050 5050		6.3 70	70 21	F C	8.1	41900	--	--	--	--	--	--	--	15300 431.46 118	--	--	--	30600		9E
		E0 B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE																		
10/21/70 1000	5050 5050		7.5 76	61 16	F C	7.9	42000 43700	--	--	--	--	--	--	--	17400 490.68 112	--	--	--	32300		6E
11/17/70 0950	5050 5050		7.0 69	59 15	F C	8.2	41000 41800	--	--	--	--	--	--	--	16900 476.58 114	--	--	--	30800		10E
12/16/70 0815	5050 5050		8.7 79	52 11	F C	7.7	32000 33000	--	--	--	--	--	--	--	12300 346.86 105	--	--	--	22800		25E
01/28/71 0750	5050 5050		9.0 81	51 11	F C	8.0	30500 29100	--	--	--	--	--	--	--	11600 327.12 112	--	--	--	21100		45E
02/17/71 1330	5050 5050		9.2 86	54 12	F C	8.0	33000 29200	--	--	--	--	--	--	--	12100 341.22 117	--	--	--	21800		20E
05/11/71 0810	5050 5050		8.4 81	57.0F 13.9C	7.9	40000 31800	--	--	--	--	--	--	--	--	12800 360.96 113	--	--	--	25400		40E
		E0 B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)																		
06/23/71 0845	5050 5050		8.1 86	65 18	F C	8.4	39000 37400	--	--	--	--	--	--	--	14800 417.36 112	--	--	--	30000		8E
07/08/71 0915	5050 5050		9.7 103	65 18	F C	8.2	40000 38000	--	--	--	--	--	--	--	15200 428.64 113	--	--	--	30700		3E
08/10/71 1115	5050 5050		8.0 89	70 21	F C	8.1	40100	--	--	--	--	--	--	--	16200 456.84 114	--	--	--	31000		9E
09/21/71 1050	5050 5050		7.4 83	70 21	F C	8.3	41400	--	--	--	--	--	--	--	13600 383.52 93	--	--	--	32100		4E
		E0 B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND																		
10/21/70 1030	5050 5050		7.4 73	59 15	F C	7.8	41000 41000	--	--	--	--	--	--	--	16000 451.20 127	--	--	--	30000		4E
11/17/70 1100	5050 5050		7.6 74	58 14	F C	8.2	41000 40200	--	--	--	--	--	--	--	15800 445.56 127	--	--	--	29100		8E
12/16/70 1030	5050 5050		8.7 80	53 12	F C	7.9	31000 32500	--	--	--	--	--	--	--	12000 338.40 120	--	--	--	22100		12E
01/28/71 0730	5050 5050		8.3 73	50 10	F C	7.4	33000 30200	--	--	--	--	--	--	--	12000 338.40 129	--	--	--	22100		20E
02/17/71 1350	5050 5050		8.6 78	52 11	F C	7.9	34000 30500	--	--	--	--	--	--	--	12200 344.04 130	--	--	--	22900		7E
03/16/71 1005	5050 5050		9.3 84	52 11	F C	8.0	42000 37700	--	--	--	--	--	--	--	16000 451.20 138	--	--	--	27100		7E



TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER			
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH MCH	TURB SAR
EO B 748.1 222.4 SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND						CONTINUED													
04/13/71	5050		9.0	55	F	8.1	36000	--	--	--	--	--	--	12900	--	--	--	23800	7E
0910	5050		85	13	C		33900							363.78					
														123					
05/11/71	5050		8.2	60.5	F	8.0	35000	--	--	--	--	--	--	14100	--	--	--	27600	15E
0812	5050		82	15.8	C		36800							397.62					
														124					
EO B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND																			
06/23/71	5050		6.4	59	F	8.2	40500	--	--	--	--	--	--	15800	--	--	--	32100	9E
0700	5050		63	15	C		39200							445.56					
														114					
07/08/71	5050		7.3	61	F	7.7	43000	--	--	--	--	--	--	15400	--	--	--	31900	7E
0640	5050		74	16	C		39800							434.78					
														109					
08/10/71	5050		5.9	64	F	7.9		--	--	--	--	--	--	16400	--	--	--	31700	6E
0900	5050		62	18	C		41500							462.48					
														111					
09/21/71	5050		7.0	63	F	7.9		--	--	--	--	--	--	15500	--	--	--	29800	3E
0715	5050		72	17	C		40100							437.10					
														109					
EO B 757.7 226.2 SAN PABLO STRAIT WEST OF THE BROTHERS																			
10/21/70	5050		8.2	60	F	7.9	35000	--	--	--	--	--	--	13500	--	--	--	25100	3E
1120	5050		82	16	C		35500							380.70					
														123					
11/17/70	5050		7.8	59	F	8.2	38000	--	--	--	--	--	--	13600	--	--	--	24600	6E
1145	5050		77	15	C		35300							383.52					
														125					
12/16/70	5050		9.7	51	F	7.5	13000	--	--	--	--	--	--	4460	--	--	--	8000	20E
1220	5050		87	11	C		13700							125.77					
														106					
01/28/71	5050		8.6	50	F	7.5	28000	--	--	--	--	--	--	9780	--	--	--	18100	25E
1000	5050		76	10	C		25600							275.80					
														124					
02/17/71	5050		9.7	52	F	7.8	21000	--	--	--	--	--	--	6350	--	--	--	12400	15E
1450	5050		88	11	C		18500							179.07					
														111					
03/16/71	5050		9.5	53	F	7.8	15000	--	--	--	--	--	--	8800	--	--	--	14900	10E
1050	5050		87	12	C		22600							248.16					
														126					
04/13/71	5050		9.0	56	F	7.8	21500	--	--	--	--	--	--	6740	--	--	--	13100	25E
1010	5050		86	13	C		20100							190.07					
														109					
05/11/71	5050		8.8	59.0	F	7.8	20800	--	--	--	--	--	--	9000	--	--	--	17500	30E
1000	5050		87	15.0	C		25200							253.80					
														116					
EO B 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT																			
03/24/71	5001		9.0	54	F	7.7		--	--	--	--	--	--	13500	1.3	--	--		14A
1130	5006		83	12	C		38100							380.70	.02				
		3												100					
04/21/71	5001		10.2	55	F	7.8		--	--	--	--	.0	105	--	9500	1.3	--	--	13A
1055	5006		96	13	C		27300					.00	1.72	--	267.90	.02		8.0	
		3												1					
05/19/71	5001		9.3	61	F	7.9		--	--	--	--	.0	61	--	8600	1.3	--	--	8A
1130	5006		94	16	C		25500					.00	1.00	--	242.52	.02		8.7	
		3												95					
06/16/71	5001		8.5	63	F	7.5		--	--	--	--	.0	108	--	9500	.9	--	--	6A
0930	5006		87	17	C		27800					.00	1.77	--	267.90	.01		8.4	
		3												1					

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	OO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER			
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR
E0 3 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT						CONTINUED													
07/15/71 0950	5001 5006		8.6 90	64 18	F C	7.8 32500	--	--	--	--	.0 .00	113 1.85	-- 1	11000 310.20	1.3 .02	-- 6.6	--	--	4A
08/17/71 1430	5001 5006		8.2 88	66 19	F C	8.1 36200	--	--	--	--	.0 .00	118 1.93	-- 1	14200 400.44	1.3 .02	-- 4.2	--	--	10A
09/15/71 1310	5001 5006		7.8 87	70 21	F C	7.8 34700	--	--	--	--	.0 .00	74 1.21	-- 1	12200 344.04	.9 .01	-- 4.8	--	--	6A
E0 B 802.3 207.1 SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ																			
10/07/70 1045	5001 5006		9.2 95	63 17	F C	7.7 15100	--	--	--	--	--	--	--	--	.4 .01	--	--	2.0	28A
11/20/70 1035	5001 5006		8.4 83	59 15	F C	7.6 16500	--	--	--	--	--	--	--	--	.7 .01	--	--	11.0	22A
01/12/71 0850	5001 5006			48 9	F C		7050	--	--	--	--	--	--	--	--	--	--	--	--
02/09/71 1330	5001 5006			52 11	F C		10300	--	--	--	--	--	--	--	--	--	--	--	--
03/04/71 0825	5001 5006		10.8 95	50 10	F C	6.7 14800	--	--	--	--	.0 .00	96 1.57	-- 1	--	.9 .01	--	--	14.0	28A
03/24/71 1300	5001 5006		9.6 91	55 13	F C	7.5 18200	--	--	--	--	.0 .00	98 1.61	-- 1	--	--	--	--	8.1	50A
04/06/71 1130	5001 5006		10.0 99	59 15	F C	7.7 7350	--	--	--	--	.0 .00	79 1.29	-- 2	--	.9 .01	--	--	13.0	30A
04/21/71 1205	5001 5006		10.3 100	57 14	F C	7.6 7470	--	--	--	--	--	--	--	--	--	--	--	13.0	39A
05/04/71 1105	5001 5006		9.2 89	57 14	F C	7.5 14400	--	--	--	--	.0 .00	79 1.29	-- 1	--	.8 .01	--	--	13.0	32A
05/11/71 1155	5001 5006			63 17	F C		1270	--	--	--	--	--	--	--	--	--	--	--	--
05/19/71 1245	5001 5006		9.7 102	64 18	F C	7.6 8360	--	--	--	--	--	--	--	--	--	--	--	12.0	21A
06/02/71 1105	5001 5006		9.3 96	63 17	F C	7.8 7240	--	--	--	--	.0 .00	79 1.29	-- 2	--	.4 .01	--	--	11.0	19A
06/16/71 1100	5001 5006		9.9 106	66 19	F C	7.5 6870	--	--	--	--	--	--	--	--	--	--	--	12.0	20A
06/30/71 0925	5001 5006		9.0 98	68 20	F C	7.5 10200	--	--	--	--	.0 .00	78 1.28	-- 1	--	.9 .01	--	--	10.0	18A
07/15/71 1115	5001 5006		9.0 98	68 20	F C	7.8 14700	--	--	--	--	--	--	--	--	--	--	--	7.4	11A
08/03/71 1345	5001 5006		9.3 104	70 21	F C	8.0 17800	--	--	--	--	.0 .00	80 1.31	-- 1	--	.7 .01	--	--	3.6	16A
08/10/71 1230	5001 5006			73 23	F C		10700	--	--	--	--	--	--	--	--	--	--	--	--
08/17/71 1535	5001 5006		8.5 95	70 21	F C	8.0 18400	--	--	--	--	--	--	--	--	--	--	--	1.8	17A
08/31/71 1245	5001 5006		9.4 105	70 21	F C	7.9 11900	--	--	--	--	.0 .00	69 1.13	-- 1	--	.7 .01	--	--	10.0	20A
09/15/71 1415	5001 5006		7.5 87	73 23	F C	7.5 15500	--	--	--	--	--	--	--	--	--	--	--	6.9	18A
09/28/71 1050	5001 5006		8.6 90	64 18	F C	7.7 11300	--	--	--	--	.0 .00	90 1.48	-- 1	--	.7 .01	--	--	9.5	22A
E0 B 802.5 208.1 SUISUN BAY AT BENICIA (MIDDLE OF PIER)																			
06/03/71 1015	5050		61 16	F C	7.8 500	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER				
						CA	MG	NA	K	CO3	HCO3	PERCENT REACTANCE VALUE	SO4	CL	NO3	B	F	TDS SUM
EO B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND																		
10/07/70 1200	5001 5006		9.3 96	63 17	F C	7.6 1550	--	--	--	--	--	--	--	.4 .01	--	--	13.0	55A
11/20/70 1130	5001 5006		9.6 93	57 14	F C	7.2 361	--	--	--	--	--	--	--	1.3 .02 1	--	--	16.0	28A
03/04/71 1000	5001 5006		11.8 104	50 10	F C	6.8 663	--	--	--	.0 .00	79 1.29 19	--	--	1.3 .02	--	--	18.0	39A
03/24/71 1345	5001 5006		10.7 101	55 13	F C	7.4 436	--	--	--	.0 .00	70 1.15 26	--	--	--	--	--	13.0	65A
04/06/71 1245	5001 5006		10.4 103	59 15	F C	7.5 140	--	--	--	.0 .00	64 1.05 75	--	--	.4 .01 1	--	--	16.0	70A
04/21/71 1255	5001 5006		10.6 102	57 14	F C	7.6 144	--	--	--	--	--	--	--	--	--	--	16.0	28A
05/04/71 1305	5001 5006		10.8 107	59 15	F C	7.5 179	--	--	--	.0 .00	62 1.02 57	--	--	.0 .00	--	--	15.0	27A
05/19/71 1335	5001 5006		10.0 105	64 18	F C	7.7 157	--	--	--	--	--	--	--	--	--	--	13.0	17A
06/02/71 1235	5001 5006		9.8 103	64 18	F C	7.6 172	--	--	--	.0 .00	70 1.15 67	--	--	.2 .00	--	--	13.0	15A
06/16/71 1150	5001 5006		10.1 112	70 21	F C	7.5 156	--	--	--	--	--	--	--	--	--	--	14.0	18A
06/30/71 1105	5001 5006		9.2 102	70 21	F C	7.5 251	--	--	--	.0 .00	60 .98 39	--	--	.1 .00	--	--	13.0	22A
07/15/71 1205	5001 5006		9.3 104	70 21	F C	7.9 1870	--	--	--	--	--	--	--	--	--	--	11.0	37A
08/03/71 1520	5001 5006		9.4 107	72 22	F C	8.0 2550	--	--	--	.0 .00	64 1.05 4	--	--	.0 .00	--	--	11.0	37A
08/17/71 1620	5001 5006		9.2 106	73 23	F C	7.9 1920	--	--	--	--	--	--	--	--	--	--	12.0	40A
08/31/71 1430	5001 5006		9.4 105	70 21	F C	8.0 553	--	--	--	.0 .00	67 1.10 20	--	--	.3 .00	--	--	15.0	27A
09/15/71 1500	5001 5006		7.9 91	73 23	F C	7.5 639	--	--	--	--	--	--	--	--	--	--	13.0	35A
09/28/71 1230	5001 5006		8.7 91	64 18	F C	7.7 227	--	--	--	7.0 .23 10	56 .92 41	--	--	.3 .00	--	--	15.0	26A
EO B 803.2 204.8 SUISUN BAY ABOVE AVON PIER																		
10/09/70 1235	5001 5006		8.9 95	66 19	F C	7.7 19100	--	--	--	--	--	--	--	--	--	--	--	35A
03/04/71 0845	5001 5006		10.9 96	50 10	F C	6.8 14500	--	--	--	--	--	--	--	--	--	--	14.0	26A
EO B 803.5 217.0 SAN PABLO BAY NEAR RODEO																		
03/24/71 1200	5001 5006		9.6 93	57 14	F C	7.6 28000	--	--	--	--	--	--	8600 242.52 87	1.3 .02	--	--	5.3	30A
04/21/71 1120	5001 5006		10.1 96	55 13	F C	7.7 20700	--	--	--	.0 .00	95 1.56 1	--	6900 194.58 94	.9 .01	--	--	10.0	55A
05/19/71 1200	5001 5006		8.6 87	61 16	F C	7.8 20900	--	--	--	.0 .00	95 1.56 1	--	7100 200.22 96	.4 .01	--	--	8.9	10A
06/16/71 1005	5001 5006		10.8 120	70 21	F C	7.7 19500	--	--	--	.0 .00	99 1.62 1	--	6400 180.48 93	.9 .01	--	--	9.6	13A
07/15/71 1025	5001 5006		8.4 88	64 18	F C	7.7 27900	--	--	--	.0 .00	107 1.75 1	--	9500 267.90 96	.9 .01	--	--	7.4	14A
08/17/71 1500	5001 5006		8.7 97	70 21	F C	8.2 27200	--	--	--	.0 .00	102 1.67 1	--	9400 265.08 97	.9 .01	--	--	3.9	22A
09/15/71 1340	5001 5006		7.5 85	72 22	F C	7.6 26700	--	--	--	.0 .00	98 1.61 1	--	7100 200.22 75	.9 .01	--	--	6.1	10A

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	OO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER			
						CA	MG	NA	K	CO3	HCO3	504	CL	NO3	8	F	TDS SUM	TH NCH
E0 8 803.6 159.3 SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS																		
10/09/70	5001		10.0	64	F 7.7	--	--	--	--	--	--	--	--	--	--	--	60A	
1310	5006	3	105	18	C	5350												
03/04/71	5001		11.7	50	F 7.0	--	--	--	--	--	--	--	--	--	--	16.0	50A	
0915	5006	3	103	10	C	2180												
05/04/71	5001		11.0	59	F 7.4	--	--	--	--	--	--	--	--	--	--	15.0	55A	
1215	5006	3	109	15	C	320												
06/02/71	5001		9.9	64	F 7.8	--	--	--	--	--	--	--	--	--	--	12.0	17A	
1150	5006	3	104	18	C	204												
06/30/71	5001		9.4	70	F 7.6	--	--	--	--	--	--	--	--	--	--	12.0	33A	
1020	5006	3	105	21	C	1650												
08/03/71	5001		9.4	70	F 8.0	--	--	--	--	--	--	--	--	--	--	8.9	32A	
1435	5006	3	105	21	C	3710												
08/31/71	5001		9.7	72	F 8.1	--	--	--	--	--	--	--	--	--	--	11.0	32A	
1340	5006	3	110	22	C	1600												
09/28/71	5001		8.9	66	F 7.6	--	--	--	--	--	--	--	--	--	--	11.0	37A	
1145	5006	3	95	19	C	888												
E0 8 804.0 203.0 SUISUN BAY NEAR PRESTON POINT																		
10/09/70	5001		9.3	64	F 7.8	--	--	--	--	--	--	--	--	--	--	--	38A	
1245	5006	3	98	18	C	15500												
03/04/71	5001		11.0	50	F 6.7	--	--	--	--	--	--	--	--	--	--	14.0	65A	
0900	5006	3	97	10	C	9000												
05/04/71	5001		10.5	59	F 7.5	--	--	--	--	--	--	--	--	--	--	14.0	50A	
1150	5006	3	104	15	C	2900												
06/02/71	5001		10.6	64	F 8.1	--	--	--	--	--	--	--	--	--	--	12.0	27A	
1130	5006	3	111	18	C	1180												
06/30/71	5001		9.6	68	F 7.6	--	--	--	--	--	--	--	--	--	--	7.5	40A	
0955	5006	3	105	20	C	3270												
08/03/71	5001		9.1	70	F 8.0	--	--	--	--	--	--	--	--	--	--	4.2	40A	
1415	5006	3	101	21	C	11800												
08/31/71	5001		9.4	70	F 7.9	--	--	--	--	--	--	--	--	--	--	9.2	34A	
1310	5006	3	105	21	C	6760												
09/28/71	5001		8.9	64	F 7.5	--	--	--	--	--	--	--	--	--	--	12.0	37A	
1115	5006	3	93	18	C	3330												
E0 8 804.4 156.2 HONKER BAY NEAR WHEELER POINT																		
10/09/70	5001		9.3	64	F 7.7	--	--	--	--	--	--	--	--	--	--	--	60A	
1330	5006	3	98	18	C	1960												
03/04/71	5001		11.7	50	F 6.8	--	--	--	--	.0	.78	--	--	1.3	--	19.0	45A	
0935	5006	3	103	10	C	609				.00	1.28 21			.02				
03/23/71	5001		10.7	55	F 7.1	--	--	--	--	.0	.69	--	--	--	--	12.0	55A	
1135	5006	3	101	13	C	426				.00	1.13 27							
04/06/71	5001		10.5	59	F 7.5	--	--	--	--	--	.63	--	--	.0	--	16.0	70A	
1215	5006	3	104	15	C	140					1.03 74			.00				
04/20/71	5001		10.3	57	F 7.3	--	--	--	--	--	--	--	--	--	--	17.0	50A	
1030	5006	3	100	14	C	153												
05/04/71	5001		11.3	59	F 7.5	--	--	--	--	.0	.64	--	--	.1	--	15.0	37A	
1240	5006	3	112	15	C	174				.00	1.05 60			.00				
05/18/71	5001		10.4	63	F 7.7	--	--	--	--	--	--	--	--	--	--	15.0	22A	
1020	5006	3	107	17	C	165												
06/02/71	5001		10.4	64	F 7.8	--	--	--	--	.0	.70	--	--	.4	--	13.0	24A	
1210	5006	3	109	18	C	175				.00	1.15 66			.01 1				
06/15/71	5001		9.8	68	F 7.5	--	--	--	--	--	--	--	--	--	--	14.0	30A	
0940	5006	3	107	20	C	218												
06/30/71	5001		9.5	70	F 7.5	--	--	--	--	.0	.60	--	--	.1	--	13.0	34A	
1035	5006	3	106	21	C	332				.00	.98 30			.00				

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER						
						CA	MG	NA	K	CO3	HCO3	504	CL	NO3	PERCENT REACTANCE VALUE	B	F	TDS SUM	TH NCH	TURB SAR
E0 B 804.4 156.2 HONKER BAY NEAR WHEELER POINT						CONTINUED														
07/14/71 0835	5001 5006		9.1 103	72 22	F C	7.7 1210	--	--	--	--	--	--	--	--	--	--	--	8.0		45A
08/03/71 1455	5001 5006		9.3 106	72 22	F C	7.9 3160	--	--	--	--	.0 .00	64 1.05	--	--	.1 .00	--	--	11.0		55A
08/16/71 1245	5001 5006		8.7 99	72 22	F C	7.7 1830	--	--	--	--	--	--	--	--	--	--	--	12.0		60A
08/31/71 1400	5001 5006		9.4 105	70 21	F C	8.0 655	--	--	--	--	.0 .00	67 1.10	--	--	.3 .00	--	--	13.0		37A
09/14/71 1310	5001 5006		7.9 93	75 24	F C	7.6 433	--	--	--	--	--	--	--	--	--	--	--	13.0		37A
09/28/71 1200	5001 5006		8.8 92	64 18	F C	7.7 198	--	--	--	--	.0 .00	92 1.51	--	--	.3 .00	--	--	13.0		33A
E0 B 805.3 226.3 SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER																				
03/24/71 1100	5001 5006		9.6 91	55 13	F C	7.4 28000	--	--	--	--	--	--	--	9700 273.54	1.8 .03	--	--	--		22A
04/21/71 1015	5001 5006		10.1 93	54 12	F C	7.6 24600	--	--	--	--	.0 .00	101 1.66	--	8500 239.70	.9 .01	--	--	8.8		40A
05/19/71 1050	5001 5006		9.4 97	63 17	F C	7.9 23100	--	--	--	--	.0 .00	141 2.31	--	7700 217.14	.4 .01	--	--	8.7		16A
06/16/71 0840	5001 5006		9.6 103	66 19	F C	7.5 24000	--	--	--	--	.0 .00	106 1.74	--	8300 234.06	.9 .01	--	--	9.6		8A
07/15/71 0915	5001 5006		8.1 87	66 19	F C	8.1 26700	--	--	--	--	.0 .00	106 1.74	--	8600 242.52	.4 .01	--	--	9.7		10A
08/17/71 1335	5001 5006		8.6 94	68 20	F C	8.1 30300	--	--	--	--	.0 .00	111 1.82	--	10700 301.74	2.2 .04	--	--	6.8		70A
09/15/71 1240	5001 5006		7.6 91	77 25	F C	7.9 26800	--	--	--	--	.0 .00	141 2.31	--	9200 259.44	.4 .01	--	--	7.1		14A
E0 B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH																				
10/07/70 1000	5001 5006		9.6 97	61 16	F C	7.6 5470	--	--	--	--	--	--	--	--	.2 .00	--	--	7.0		140A
11/20/70 1000	5001 5006		9.2 89	57 14	F C	7.4 3090	--	--	--	--	--	--	--	--	.8 .01	--	--	14.0		70A
03/04/71 0755	5001 5006		11.3 97	48 9	F C	6.8 2740	--	--	--	--	.0 .00	82 1.34	--	--	1.3 .02	--	--	17.0		70A
03/23/71 1030	5001 5006		10.5 99	55 13	F C	7.3 2420	--	--	--	--	.0 .00	75 1.23	--	--	--	--	--	13.0		70A
04/06/71 1030	5001 5006		10.2 101	59 15	F C	7.5 145	--	--	--	--	.0 .00	62 1.02	--	--	.0 .00	--	--	16.0		80A
04/20/71 0955	5001 5006		10.1 98	57 14	F C	7.3 188	--	--	--	--	--	--	--	--	--	--	--	17.0		100A
05/04/71 1015	5001 5006		10.5 101	57 14	F C	7.3 758	--	--	--	--	.0 .00	63 1.03	--	--	.2 .00	--	--	15.0		75A
05/18/71 0920	5001 5006		10.5 108	63 17	F C	7.3 286	--	--	--	--	--	--	--	--	--	--	--	15.0		40A
06/02/71 1020	5001 5006		10.0 103	63 17	F C	7.9 372	--	--	--	--	.0 .00	63 1.03	--	--	.1 .00	--	--	13.0		40A
06/15/71 0900	5001 5006		9.7 104	66 19	F C	7.5 580	--	--	--	--	--	--	--	--	--	--	--	14.0		50A
06/30/71 0835	5001 5006		9.5 104	68 20	F C	7.7 1550	--	--	--	--	.0 .00	64 1.05	--	--	.2 .00	--	--	--		60A
07/14/71 0745	5001 5006		9.2 104	72 22	F C	7.6 3140	--	--	--	--	--	--	--	--	--	--	--	9.2		32A
08/03/71 1300	5001 5006		9.4 105	70 21	F C	7.8 7560	--	--	--	--	.0 .00	64 1.05	--	--	.1 .00	--	--	6.6		60A

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER				TURB SAR		
						CA	MG	NA	K	CD3	PERCENT HCO3	SD4	CL	REACTANCE VALUE NO3	B	F	TDS		TH	NCH
E0 B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH						CONTINUED														
08/16/71 1200	5001 5006		9.2 104	72 22	F C	7.8 4640	--	--	--	--	--	--	--	--	--	--	--	6.9		45A
08/31/71 1200	5001 5006		9.7 108	70 21	F C	8.0 2510	--	--	--	--	.0 .00	81 1.33	--	--	.3 .00	--	--	5.4		47A
09/14/71 1200	5001 5006		8.1 94	73 23	F C	7.7 2270	--	--	--	--	--	--	--	--	--	--	--	12.0		48A
09/28/71 0950	5001 5006		9.4 99	64 18	F C	7.5 338	--	--	--	--	.0 .00	72 1.18	--	--	.4 .01	--	--	14.0		34A
E0 S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS																				
10/07/70 0840	5001 5006		8.3 85	63 17	F C	7.4 5480	--	--	--	--	--	--	--	--	--	--	--	--		110A
11/06/70 0920	5001 5006		7.5 72	57 14	F C	7.1 5100	50 2.50	110 9.05	840 36.54	36 .92	.0 .00	102 1.67	240 5.00	1440 40.61	.9 .01	.30 11.0	--	3080 2778	578 494	90A 15.2
12/09/70 1040	5001 5006		9.3 84	52 11	F C	7.1 1410	--	--	--	--	--	--	--	--	--	--	--	--		120A
01/06/71 1020	5001 5006		11.1 91	45 7	F C	7.2 704	--	--	--	--	--	--	--	--	--	--	--	--		80A
02/05/71 1000	5001 5006		9.2 79	48 9	F C	7.1 762	--	--	--	--	--	--	--	--	--	--	--	--		120A
03/05/71 0915	5001 5006		10.0 88	50 10	F C	7.2 990	--	--	--	--	--	--	--	--	--	--	--	--		75A
04/05/71 1020	5001 5006		8.0 84	64 18	F C	7.2 1310	--	--	--	--	--	--	--	--	--	--	--	--		140A
05/17/71 1115	5001 5006		8.8 92	64 18	F C	7.4 1450	27 1.35	34 2.80	215 9.35	13 .33	.0 .00	100 1.64	105 2.19	360 10.15	.8 .01	.20 12.0	--	868 816	208 126	100A 6.5
06/18/71 1015	5001 5006		7.3 81	70 21	F C	7.1 1060	--	--	--	--	--	--	--	--	--	--	--	--		130A
07/30/71 1005	5001 5006		8.2 91	70 21	F C	7.6 4540	--	--	--	--	--	--	--	--	--	--	--	--		45A
08/27/71 0900	5001 5006		7.3 81	70 21	F C	7.7 4240	40 2.00	85 6.99	680 29.58	31 .79	.0 .00	84 1.38	160 3.33	1180 33.28	.4 .01	.20 7.3	--	2580 2225	450 381	50A 14.0
09/27/71 1000	5001 5006		9.0 93	63 17	F C	7.2 1540	--	--	--	--	--	--	--	--	--	--	--	--		55A
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH DN JOICE ISLAND																				
10/07/70 1040	5001 5006		8.0 82	63 17	F C	7.5 5350	--	--	--	--	--	--	--	--	--	--	--	--		75A
11/06/70 1215	5001 5006		7.3 72	59 15	F C	7.3 3670	45 2.25	90 7.40	570 24.80	27 .69	.0 .00	141 2.31	180 3.75	986 27.81	2.2 .04	.30 11.0	--	2200 1981	483 367	75A 11.3
12/09/70 1305	5001 5006		7.8 72	54 12	F C	7.0 2270	--	--	--	--	--	--	--	--	--	--	--	--		100A
01/06/71 1245	5001 5006		9.6 79	45 7	F C	7.1 1770	--	--	--	--	--	--	--	--	--	--	--	--		90A
02/05/71 1255	5001 5006		8.7 79	52 11	F C	7.0 1610	--	--	--	--	--	--	--	--	--	--	--	--		100A
03/05/71 1115	5001 5006		9.3 82	50 10	F C	7.2 1900	--	--	--	--	--	--	--	--	--	--	--	--		120A
04/05/71 1305	5001 5006		7.6 81	66 19	F C	7.2 2120	--	--	--	--	--	--	--	--	--	--	--	--		120A
05/17/71 1405	5001 5006		8.7 93	66 19	F C	7.9 1860	36 1.80	46 3.78	275 11.96	15 .38	.0 .00	127 2.08	140 2.91	450 12.69	3.7 .06	.60 11.0	--	1860 1040	279 175	75A 7.2
06/18/71 1240	5001 5006		9.1 105	73 23	F C	7.4 961	--	--	--	--	--	--	--	--	--	--	--	--		95A
07/30/71 1230	5001 5006		9.3 106	72 22	F C	7.5 3650	--	--	--	--	--	--	--	--	--	--	--	--		45A

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.M. D DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER			
							CA	MG	NA	K	CO3	HCO3	PERCENT REACTANCE	SO4	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR	
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND CONTINUED																						
08/27/71 1240	5001 5006		7.8 90	73 23	F C	7.9	4390	40 2.00	90 7.40	720 31.32	27 .69	.0 .00	102 1.67	180 3.75	1220 34.40	.4 .01	.20	-- 4.2	2570 2332	470 387	50A 14.4	
09/27/71 1250	5001 5006		8.1 85	64 18	F C	7.6	2180	--	--	--	--	--	--	--	--	--	--	--	--	--	60A	
E0 S 811.0 204.8 CHADBOURNE SLOUGH AT CHADBOURNE ROAD NEAR SUISUN																						
10/07/70 0950	5001 5006		8.4 86	63 17	F C	7.6	5210	--	--	--	--	--	--	--	--	--	--	--	--	--	50A	
11/06/70 1040	5001 5006		7.0 69	59 15	F C	7.2	4180	48 2.40	100 8.22	640 27.84	32 .82	.0 .00	129 2.11	200 4.16	1150 32.43	1.3 .02	.00	-- 13.0	2500 2248	532 426	70A 12.1	
12/09/70 1215	5001 5006		8.6 80	54 12	F C	7.0	2220	--	--	--	--	--	--	--	--	--	--	--	--	--	100A	
01/06/71 1110	5001 5006		10.7 88	45 7	F C	7.0	1720	--	--	--	--	--	--	--	--	--	--	--	--	--	90A	
02/05/71 1120	5001 5006		9.0 80	50 10	F C	7.0	1310	--	--	--	--	--	--	--	--	--	--	--	--	--	100A	
03/05/71 1015	5001 5006		9.6 87	52 11	F C	7.2	1850	--	--	--	--	--	--	--	--	--	--	--	--	--	130A	
04/05/71 1155	5001 5006		7.7 79	63 17	F C	7.3	1940	--	--	--	--	--	--	--	--	--	--	--	--	--	110A	
05/17/71 1250	5001 5006		7.9 85	66 19	F C	7.7	1400	37 1.85	42 3.45	185 8.05	11 .28	.0 .00	165 2.70	110 2.29	300 8.46	2.7 .04	.20	-- 14.0	710 783	265 130	80A 4.9	
06/19/71 1135	5001 5006		8.7 99	72 22	F C	7.3	896	--	--	--	--	--	--	--	--	--	--	--	--	--	100A	
07/30/71 1120	5001 5006		8.2 91	70 21	F C	7.6	1640	--	--	--	--	--	--	--	--	--	--	--	--	--	90A	
08/27/71 1115	5001 5006		6.6 74	70 21	F C	7.7	4040	22 1.10	90 7.40	660 28.71	28 .72	.0 .00	113 1.85	180 3.75	1100 31.02	.9 .01	.20	-- 7.3	2380 2144	425 333	40A 13.9	
09/27/71 1115	5001 5006		8.4 85	61 16	F C	7.3	922	--	--	--	--	--	--	--	--	--	--	--	--	--	35A	
E0 S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD																						
10/07/70 1110	5001 5006		8.6 89	63 17	F C	7.5	5930	--	--	--	--	--	--	--	--	--	--	--	--	--	50A	
11/06/70 1300	5001 5006		7.0 69	59 15	F C	7.1	5920	60 2.99	130 10.69	1000 43.50	45 1.15	.0 .00	103 1.69	280 5.83	1740 49.07	.9 .01	.50	-- 9.0	3600 3316	685 600	65A 16.6	
12/09/70 1345	5001 5006		9.0 81	52 11	F C	7.0	1820	--	--	--	--	--	--	--	--	--	--	--	--	--	95A	
01/06/71 1320	5001 5006		10.7 88	45 7	F C	7.0	1570	--	--	--	--	--	--	--	--	--	--	--	--	--	85A	
02/05/71 1340	5001 5006		10.1 89	50 10	F C	6.9	1120	--	--	--	--	--	--	--	--	--	--	--	--	--	100A	
03/05/71 1220	5001 5006		9.7 86	50 10	F C	7.0	1900	--	--	--	--	--	--	--	--	--	--	--	--	--	130A	
04/05/71 1345	5001 5006		8.4 88	64 18	F C	6.9	1130	--	--	--	--	--	--	--	--	--	--	--	--	--	90A	
05/17/71 1450	5001 5006		10.1 108	66 19	F C	7.8	683	18 .90	17 1.40	96 4.18	6.5 .17	.0 .00	73 1.20	50 1.04	154 4.34	.4 .01	--	-- 13.0	409 391	115 55	65A 3.9	
06/18/71 1320	5001 5006		8.9 103	73 23	F C	7.3	746	--	--	--	--	--	--	--	--	--	--	--	--	--	70A	
07/30/71 1310	5001 5006		8.6 98	72 22	F C	7.4	2210	--	--	--	--	--	--	--	--	--	--	--	--	--	60A	
08/27/71 1330	5001 5006		7.9 91	73 23	F C	7.9	3610	36 1.80	75 6.17	580 25.23	11 .28	.0 .00	80 1.31	150 3.12	990 27.92	.4 .01	--	-- 6.5	2100 1888	399 333	40A 12.6	
09/27/71 1320	5001 5006		8.6 92	66 19	F C	7.3	2310	--	--	--	--	--	--	--	--	--	--	--	--	--	50A	

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. D DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER			MILLIGRAMS PER LITER					
						CA	MG	NA	K	CO3	HCD3	PERCENT	REACTANCE	VALUE	8	F	TDS	TH	TURB	
CORDELIA SLOUGH AT UPPER END NEAR CORDELIA																				
10/07/70	5001		207.2	59	F 7.8														31A	
0910	5006	3	86	15	C	543														
04/05/71	5001		207.2	66	F 7.2														80A	
1120	5006	3	70	19	C	1300														
05/17/71	5001		207.2	66	F 7.7														75A	
1205	5006	1	74	19	C	1190	1.60	2.63	6.74	21	.00	3.28	1.46	6.63	.02	.30	27.0	891	212	75A
06/18/71	5001		207.2	72	F 7.2														90A	
1100	5006	2	78	22	C	751														
07/30/71	5001		207.2	68	F 8.2														120A	
1040	5006	3	72	20	C	923														
08/27/71	5001		207.2	68	F 8.0														80A	
1015	5006	2	75	20	C	606	1.00	2.38	2.65	12	.00	2.88	.73	2.48	.01	.00	16.0	390	170	80A
09/27/71	5001		207.2	59	F 7.6														15A	
1045	5006	3	96	15	C	323														
HILL SLOUGH AT GRIZZLY ISLAND ROAD																				
10/07/70	5001		201.2	59	F 7.9														55A	
1130	5006	3	91	15	C	657														
11/06/70	5001		201.2	59	F 7.6														45A	
1330	5006	3	84	15	C	530	1.05	2.30	2.00	.09	.00	2.82	.73	1.69	.01	.20	16.0	314	168	45A
12/09/70	5001		201.2	54	F 7.0														130A	
1420	5006	3	51	12	C	1410														
01/06/71	5001		201.2	45	F 7.3														55A	
1345	5006	3	69	7	C	2530														
02/05/71	5001		201.2	50	F 7.3														75A	
1400	5006	3	54	10	C	2890														
03/05/71	5001		201.2	52	F 7.6														65A	
1245	5006	3	81	11	C	3010														
04/05/71	5001		201.2	66	F 7.3														100A	
1415	5006	3	71	19	C	2930														
06/18/71	5001		201.2	73	F 7.6														85A	
1345	5006	3	90	23	C	2000														
07/30/71	5001		201.2	70	F 7.8														80A	
1335	5006	3	94	21	C	2320														
08/27/71	5001		201.2	70	F 8.0														45A	
1400	5006	3	90	21	C	3430	46	80	550	25	.0	168	170	920	1.8	.40	2030	444	45A	
09/27/71	5001		201.2	63	F 7.6														36A	
1345	5006	3	96	17	C	411	2.30	6.58	23.93	.64	.00	2.75	3.54	25.94	.03	3.4	1879	307	11.4	
NAPA RIVER AT DUTTONS LANDING																				
04/13/71	5050		1100.50	60	F 8.2	4500														
1130			109	16	C															
NAPA RIVER NEAR NAPA																				
10/22/70	5050	2.49	13.9	63	F 8.0	390	26	23	21	--	7.0	170	--	21	--	--	--	161	3E	
1445	5050	2.8	144	17	C 8.5	386	1.30	1.92	.91		.23	2.79		.59				10	0.7	
01/13/71	5050	6.51	11.8	46	F 7.3	75	12	6.8	7.5	--	.0	67	--	5.9	--	--	--	58	90E	
1330	5050	8.09	99	8	C 7.6	151	.60	.56	.33		.00	1.10		.17				3	0.4	
02/19/71	5050	4.04	11.5	51	F 7.3	305	22	16	15	--	.0	141	--	11	--	--	--	122	6E	
1030	5050	1.66	103	11	C 8.2	296	1.10	1.34	.65		.00	2.31		.31				7	0.6	
04/16/71	5050	4.12	10.4	60	F 7.4	270	21	14	13	--	.0	133	--	9.5	--	--	--	112	4E	
1030	5050	1.04	104	16	C 7.8	274	1.05	1.19	.57		.00	2.18		.27				3	0.5	
05/13/71	5050	3.68	10.8	68.0F	7.7	320	22	18	18	--	.0	156	--	14	--	--	--	130	2E	
1100	5050	36	118	20.0C	8.3	331	1.10	1.50	.78		.00	2.56		.39				2	0.7	
06/17/71	5050	3.30	9.4	76	F 7.6	300	24	20	22	--	.0	173	--	16	--	--	--	143	1E	
1145	5050	112	24	C 8.3	366	1.20	1.66	.96	.26		.00	2.84		.45		32.0		1	0.8	
07/22/71	5050	3.06	12.1	79	F 8.2	370	30	20	21	--	.0	179	--	20	--	--	--	160	1E	
1300	5050	148	26	C 7.9	387	1.50	1.70	.91	.24		.00	2.93		.56				14	0.7	





TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	00 SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					MILLIGRAMS PER LITER		
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT REACTANCE VALUE	8	F	TDS SUM	TH NCH	TURB SAR			
F8		3100.00		NOYO RIVER NEAR FORT BRAGG																			
11/11/70 1430	5050 5050	70	7.4 70	56.0F 13.3C	7.0 8.0	167	15 .75 46	5.0 .41 25	10 .44 27	1.1 .03 2	.0 .00	75 1.23 75	7.2 .15 9	8.8 .25 15	.0 .00	.20 --	--	83 84	58 4	4E 0.6			
01/06/71 1545	5050 5050	273	10.6 83	41.0F 5.0C	7.1 7.6	109	-- --	-- --	5.8 .25 23	-- --	.0 .00	52 .85 78	-- --	7.2 .20 18	-- --	.10 --	--	--	38	6E			
02/03/71 1445	5050 5050	131	12.3 103	46 F 8 C	7.3 7.8	116	12 .60 51	3.2 .26 22	6.7 .29 25	.6 .02 2	.0 .00	55 .90 78	4.3 .09 8	6.2 .17 15	.0 .00	.00 --	--	71 60	43 2	4E 0.4			
03/03/71 1430	5050 5050	88	9.9 84	47 F 8 C	7.8 7.5	130	-- --	-- --	6.3 .27 21	-- --	.0 .00	60 .98 75	-- --	6.0 .17 13	-- --	.00 --	--	--	50	25E			
05/05/71 1330	5050 5050	4.15 90	10.5 99	55 F 13 C	7.2 7.6	131	-- --	-- --	7.0 .30 23	-- --	.0 .00	60 .98 75	-- --	5.2 .15 11	-- --	.00 --	--	--	48	4E			
07/21/71 1315	5050 5050	12	9.9 108	68 F 20 C	7.2 7.5	160	-- --	-- --	10 .44 28	-- --	.0 .00	78 1.28 80	-- --	8.4 .24 15	-- --	.10 --	--	--	60	1E			
09/15/71 1240	5050 5050	6.2	9.3 98	64 F 18 C	7.1 7.6	165	-- --	-- --	11 .48 29	-- --	.0 .00	82 1.34 81	-- --	10 .28 17	-- --	.20 --	--	--	63	2E			
F9		1100.00		RUSSIAN RIVER NEAR GUERNEVILLE																			
10/23/70 0815	5050 5050	4.96 269	7.0 71	61 F 16 C	7.3 8.0	310 307	26 1.30 42	14 1.16 38	16 .70 23	-- --	.0 .00	138 2.26 74	-- --	16 .45 15	-- --	-- --	--	--	123 10	25E 0.6			
11/19/70 0930	5050	5.14	7.7 70	52 F 11 C	7.7	340	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--	--	--	--			
12/18/70 0840	5050 5050	7.05 11600	10.3 89	48 F 9 C	7.2 6.9	150 144	12 .60 42	6.6 .54 37	5.8 .25 17	-- --	.0 .00	67 1.10 76	-- --	5.8 .16 11	-- --	-- --	--	--	57 2	280E 0.3			
02/18/71 1530	5050 5050	6.23 662	11.1 101	52 F 11 C	7.6 8.1	310 315	31 1.55 49	17 1.41 45	12 .52 17	-- --	.0 .00	163 2.67 85	-- --	9.9 .28 9	-- --	-- --	--	--	148 15	10E 0.4			
03/25/71 1430	5050 5050	8.80 2540	13.5 127	55 F 13 C	7.6 7.6	205 220	23 1.15 52	8.6 .71 32	8.2 .36 16	-- --	.0 .00	109 1.79 81	-- --	6.3 .18 8	-- --	-- --	--	--	93 4	80E 0.4			
04/16/71 0720	5050	7.48	9.3 92	59 F 15 C	7.5	260	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--	--	--	--			
05/13/71 0800	5050 5050	5.79 656	8.6 91	65.0F 18.3C	7.5 8.3	265 268	23 1.15 43	14 1.21 45	10 .44 16	-- --	.0 .00	144 2.36 88	-- --	6.6 .19 7	-- --	-- --	--	--	118 0	3E 0.4			
06/17/71 0800	5050 5050	4.72	7.2 82	72 F 22 C	7.5 7.7	225 270	25 1.25 46	15 1.31 49	8.3 .36 13	-- --	.0 .00	143 2.36 87	-- --	6.0 .17 6	-- --	-- --	--	--	128 11	30E 0.3			
07/22/71 1100	5050		8.0 94	75 F 24 C	7.8	250	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--	--	--	--			
08/25/71 0930	5050 5050	4.82	7.8 92	75 F 24 C	8.0 8.2	240 252	27 1.35 54	11 .93 37	8.2 .36 14	-- --	.0 .00	131 2.15 85	-- --	6.6 .19 8	-- --	-- --	--	--	114 7	2E 0.3			
09/28/71 1400	5050 5050	4.92	9.8 104	65 F 18 C	7.9 8.3	278 277	23 1.15 42	13 1.09 39	11 .48 17	-- --	.0 .00	144 2.36 85	-- --	10 .28 10	-- --	-- --	--	--	112 6	4E 0.5			
F9		1765.00		RUSSIAN RIVER NEAR HOPLAND																			
05/20/71 1630	5000	334					-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--	--	--	--			
F9		1850.00		RUSSIAN RIVER NEAR UKIAH																			
05/20/71 1300	5000	2.50 21					-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	--	--	--	--			

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Constituents

- MBAS - Methylene blue active substance,  
a measure of detergent surfactants
- BOD - Biological oxygen demand

Abbreviations

- Mg/L - Milligrams per liter
- Ug/L - Micrograms per liter
- Ft. - Feet

Lab and Sampler Agency Codes

- 5000 - U. S. Geological Survey
- 5001 - U. S. Bureau of Reclamation
- 5006 - McClellan Air Force Base Laboratory
- 5050 - Department of Water Resources
- 5063 - Santa Cruz County Health Department

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents	Samp	Lob	
DO 1100.00	BRANCIFORTE CREEK AT SANTA CRUZ	03-15-71	MBAS	0.0 Mg/L	5063	5050
		1530	Suspended Solids	24 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		1300	Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.2 Ug/L				
	Selenium	0.00 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		1230	Suspended Solids	40 Mg/L		
DO 1180.01	SAN LORENZO RIVER AT PARADISE PARK	03-15-71	MBAS	0.0 Mg/L	5063	5050
		1200	Suspended Solids	38 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		1220	Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.1 Ug/L				
	Selenium	0.00 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		1010	Suspended Solids	2 Mg/L		
DO 1220.01	ZAYANTE CREEK AT FELTON	03-15-71	MBAS	0.0 Mg/L	5063	5050
		1110	Suspended Solids	393 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		1050	Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.0 Ug/L				
	Selenium	0.00 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		0940	Suspended Solids	0.0 Mg/L		
DO 1498.01	SAN LORENZO RIVER AT BOULDER CREEK	03-15-71	MBAS	0.0 Mg/L	5063	5050
		1000	Suspended Solids	72 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		1000	Barium	0.2 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.0 Ug/L				
	Selenium	0.01 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		0900	Suspended Solids	13 Mg/L		
DO 2020.00	APTOS CREEK BELOW VALENCIA CREEK NEAR APTOS	03-15-71	MBAS	0.0 Mg/L	5063	5050
		1350	Suspended Solids	84 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		1400	Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.1 Ug/L				
	Selenium	0.00 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		1350	Suspended Solids	0.0 Mg/L		
DO 3100.00	SOQUEL CREEK AT SOQUEL	03-15-71	MBAS	0.0 Mg/L	5063	5050
		1430	Suspended Solids	18 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		1330	Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.0 Ug/L				
	Selenium	0.00 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		1300	Suspended Solids	0.0 Mg/L		
DO 4010.01	SCOTT CREEK AT HIGHWAY 1 NEAR DAVENPORT	03-15-71	MBAS	0.0 Mg/L	5063	5050
		0900	Suspended Solids	20 Mg/L		
		05-18-71	Arsenic	0.00 Mg/L		
		0830	Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
	Mercury, Total	0.0 Ug/L				
	Selenium	0.00 Mg/L				
		09-27-71	MBAS	0.0 Mg/L	5063	5050
		0750	Suspended Solids	8 Mg/L		
DI 1006.30	WATSONVILLE SLOUGH AT SAN ANDRES ROAD	05-05-71	Arsenic	0.00 Mg/L	5050	5050
		1000	Barium	0.2 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.01 Mg/L		

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lab	
D1 1006.30	WATSONVILLE SLOUGH AT SAN ANDRES ROAD (Continued)	07-08-71 1205	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.2 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.0 Ug/L			
Selenium	0.00 Mg/L						
D1 1075.30	PAJARO RIVER AT THURWACHTER ROAD	05-05-71 1030	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.0 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.2 Ug/L			
	Selenium	0.01 Mg/L					
			07-08-71 1150	Arsenic	0.00 Mg/L	5050	5050
				Barium	0.1 Mg/L		
				Cadmium	0.00 Mg/L		
				Lead	0.00 Mg/L		
Mercury, Total				0.0 Ug/L			
Selenium	0.01 Mg/L						
D1 1250.00	PAJARO RIVER NEAR CHITTENDEN	05-05-71 1130	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.0 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.5 Ug/L			
	Selenium	0.01 Mg/L					
			07-08-71 1100	Arsenic	0.00 Mg/L	5050	5050
				Barium	0.1 Mg/L		
				Cadmium	0.00 Mg/L		
				Lead	0.01 Mg/L		
Mercury, Total				0.0 Ug/L			
Selenium	0.00 Mg/L						
D1 1371.50	UVAS CREEK NEAR MORGAN HILL BELOW UVAS DAM	05-05-71 1000	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.0 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.1 Ug/L			
Selenium	0.00 Mg/L						
D1 1475.50	PLANEL AGRICULTURAL DRAIN ABOVE LLAGAS CREEK	05-05-71 1245	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.0 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.1 Ug/L			
	Selenium	0.01 Mg/L					
			07-08-71 1030	Arsenic	0.00 Mg/L	5050	5050
				Barium	0.2 Mg/L		
				Cadmium	0.00 Mg/L		
				Lead	0.00 Mg/L		
Mercury, Total				0.0 Ug/L			
Selenium	0.01 Mg/L						
D1 2450.00	SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL	05-05-71 0900	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.0 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.0 Ug/L			
Selenium	0.00 Mg/L						
D1 3220.20	ELKHORN SLOUGH AT BRIDGE NEAR HALL	05-05-71 0915	Arsenic	0.00 Mg/L	5050	5050	
			Barium	0.2 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.3 Ug/L			
	Selenium	0.00 Mg/L					
			07-08-71 0945	Arsenic	0.00 Mg/L	5050	5050
				Barium	0.1 Mg/L		
				Cadmium	0.00 Mg/L		
				Lead	0.00 Mg/L		
Mercury, Total				0.0 Ug/L			
Selenium	0.00 Mg/L						
D2 1006.30	TEMLADERO SLOUGH AT NASHUA ROAD	05-05-71 1450	Arsenic	0.01 Mg/L	5050	5050	
			Barium	0.0 Mg/L			
			Cadmium	0.00 Mg/L			
			Lead	0.00 Mg/L			
			Mercury, Total	0.2 Ug/L			
	Selenium	0.01 Mg/L					
			07-07-71 1500	Arsenic	0.00 Mg/L	5050	5050
				Barium	0.2 Mg/L		
				Cadmium	0.00 Mg/L		
				Lead	0.00 Mg/L		
Mercury, Total				0.0 Ug/L			
Selenium	0.00 Mg/L						

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents	Samp	Lab	
D2 1006.60	TEMLADERO SLOUGH AT MERRITT LAKE DRAIN	05-05-71 1300	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.0 Mg/L 0.00 Mg/L 0.2 Ug/L 0.00 Mg/L	5050	5050
		07-07-71 1445	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.1 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
D2 1009.20	SALINAS RECLAMATION CANAL BELOW ALISAL SLOUGH	05-05-71 1230	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.01 Mg/L	5050	5050
		07-07-71 1445	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.1 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
D2 1020.70	SALINAS RECLAMATION CANAL AT AIRPORT WAY	05-05-71 1030	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.02 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
		07-07-71 1335	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.1 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
D2 1030.30	BLANCO DRAIN AT PUMP LIFT	05-05-71 1200	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.01 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.01 Mg/L	5050	5050
		07-07-71 1430	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.1 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
D2 1110.50	SALINAS RIVER AT TWIN BRIDGES	05-05-71 0800	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.2 Ug/L 0.01 Mg/L	5050	5050
		07-07-71 0855	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.1 Ug/L 0.02 Mg/L	5050	5050
D2 1325.10	SALINAS RIVER NEAR GONZALES	05-05-71 1230	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
		07-07-71 1520	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.2 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.01 Mg/L	5050	5050
D2 1450.00	ARROYO SECO NEAR SOLEDAD	05-05-71 1140	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050
		07-07-71 1440	Arsenic Barium Cadmium Lead Mercury, Total Selenium	0.00 Mg/L 0.0 Mg/L 0.00 Mg/L 0.00 Mg/L 0.0 Ug/L 0.00 Mg/L	5050	5050

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lab
D2 1850.00	SALINAS RIVER NEAR BRADLEY	05-05-71 1000	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.0 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.3 Ug/L		
			Selenium	0.00 Mg/L		
		07-07-71 1035	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.0 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.01 Mg/L		
D4 1010.50	CARMEL RIVER AT HIGHWAY 1	05-05-71 1430	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.0 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.00 Mg/L		
D4 1200.00	CARMEL RIVER AT ROBLES DEL RIO	07-07-71 0700	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.01 Mg/L		
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	03-16-71 1020	Suspended Solids	48 Mg/L	5050	5050
		04-13-71 0920	Suspended Solids	26 Mg/L	5050	5050
		06-23-71 0810	Suspended Solids	11 Mg/L	5050	5050
		07-08-71 0820	Suspended Solids	9 Mg/L	5050	5050
		08-10-71 1030	Suspended Solids	18 Mg/L	5050	5050
		09-21-71 0915	Suspended Solids	43 Mg/L	5050	5050
EO B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE	10-21-70 1000	Suspended Solids	2 Mg/L	5050	5050
		11-17-70 0950	Suspended Solids	12 Mg/L	5050	5050
		12-16-70 0815	Suspended Solids	29 Mg/L	5050	5050
		01-28-71 0750	Suspended Solids	60 Mg/L	5050	5050
		02-17-71 1330	Suspended Solids	14 Mg/L	5050	5050
		05-11-71 0810	Suspended Solids	136 Mg/L	5050	5050
			Arsenic	0.00 Mg/L		
	Barium	0.1 Mg/L				
	Cadmium	0.00 Mg/L				
	Lead	0.00 Mg/L				
	Mercury, Total	0.0 Ug/L				
	Selenium	0.00 Mg/L				
EO B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	06-23-71 0845	Suspended Solids	15 Mg/L	5050	5050
		07-08-71 0915	Suspended Solids	8 Mg/L	5050	5050
		08-10-71 1115	Suspended Solids	15 Mg/L	5050	5050
		09-21-71 1050	Suspended Solids	13 Mg/L	5050	5050
EO B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND	10-21-70 1030	Suspended Solids	0 Mg/L	5050	5050
		11-17-70 1100	Suspended Solids	12 Mg/L	5050	5050
		12-16-70 1030	Suspended Solids	11 Mg/L	5050	5050
		01-28-71 0730	Suspended Solids	17 Mg/L	5050	5050
		02-17-71 1350	Suspended Solids	6 Mg/L	5050	5050
		03-16-71 1005	Suspended Solids	32 Mg/L	5050	5050
		04-13-71 0910	Suspended Solids	23 Mg/L	5050	5050

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lob	
EO B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND (Continued)	05-11-71 0812	Suspended Solids	20	Mg/L	5050	5050
			Arsenic	0.00	Mg/L		
			Barium	0.2	Mg/L		
			Cadmium	0.00	Mg/L		
			Lead	0.00	Mg/L		
			Mercury, Total	0.4	Ug/L		
			Selenium	0.00	Mg/L		
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	06-23-71 0700	Suspended Solids	16	Mg/L	5050	5050
		07-08-71 0640	Suspended Solids	14	Mg/L	5050	5050
		08-10-71 0900	Suspended Solids	19	Mg/L	5050	5050
		09-21-71 0715	Suspended Solids	13	Mg/L	5050	5050
EO B 757.7 226.2	SAN PABLO STRAIT WEST OF THE BROTHERS	10-21-70 1120	Suspended Solids	2	Mg/L	5050	5050
		11-17-70 1145	Suspended Solids	7	Mg/L	5050	5050
		12-16-70 1220	Suspended Solids	16	Mg/L	5050	5050
		01-28-71 1000	Suspended Solids	21	Mg/L	5050	5050
		02-17-71 1450	Suspended Solids	10	Mg/L	5050	5050
		03-16-71 1050	Suspended Solids	30	Mg/L	5050	5050
		04-13-71 1010	Suspended Solids	39	Mg/L	5050	5050
		05-11-71 1000	Suspended Solids	33	Mg/L	5050	5050
			Arsenic	0.00	Mg/L		
			Barium	0.0	Mg/L		
	Cadmium	0.00	Mg/L				
	Lead	0.00	Mg/L				
	Mercury, Total	0.0	Ug/L				
	Selenium	0.00	Mg/L				
EO B 801.8 222.3	SAN PABLO BAY NEAR PINOLE POINT	03-24-71 1130	Secchi Disk	3.0	Ft.	5001	5001
			BOD (5 days)	0.5	Mg/L		
			BOD (7 days)	0.7	Mg/L		
		04-21-71 1055	Secchi Disk	1.8	Ft.	5001	5001
			BOD (7 days)	1.9	Mg/L		
		05-19-71 1130	Secchi Disk	1.8	Ft.	5001	5001
			BOD (7 days)	0.7	Mg/L		
			Suspended Solids	24	Mg/L	5001	5006
			Volatile Suspended Solids	2	Mg/L		
		06-16-71 0930	Secchi Disk	2.8	Ft.	5001	5001
			Suspended Solids	14	Mg/L	5001	5006
			Volatile Suspended Solids	0	Mg/L		
		07-15-71 0950	Secchi Disk	2.9	Ft.	5001	5001
			BOD (7 days)	1.5	Mg/L		
			Suspended Solids	23	Mg/L	5001	5006
			Volatile Suspended Solids	3	Mg/L		
			Cadmium, Total	0.01	Mg/L		
			Chromium	<0.01	Mg/L		
			Copper, Total	0.08	Mg/L		
			Iron	<0.1	Mg/L		
	Lead, Total	<0.01	Mg/L				
	Manganese	<0.05	Mg/L				
	Zinc, Total	0.04	Mg/L				
08-17-71 1430	Secchi Disk	2.0	Ft.	5001	5001		
	BOD (7 days)	1.3	Mg/L				
	Suspended Solids	19	Mg/L	5001	5006		
	Volatile Suspended Solids	0	Mg/L				
09-15-71 1310	Secchi Disk	3.5	Ft.	5001	5001		
	BOD (7 days)	1.4	Mg/L				
	Suspended Solids	10	Mg/L	5001	5006		
	Volatile Suspended Solids	6	Mg/L				
	Cadmium, Total	0.01	Mg/L				
	Chromium	<0.01	Mg/L				
	Copper, Total	0.08	Mg/L				
	Iron	0.2	Mg/L				
	Lead, Total	<0.01	Mg/L				
	Manganese	<0.05	Mg/L				
	Zinc, Total	0.03	Mg/L				
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ	10-07-70 1045	Secchi Disk	0.6	Ft.	5001	5001
			BOD (5 days)	1.9	Mg/L		
			Suspended Solids	82	Mg/L	5001	5006



TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents	Samp	Lab		
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ (Continued)	11-20-70 1035	Secchi Disk	1.3 Ft.	5001	5001	
			BOD (5 days)	0.7 Mg/L			
		03-04-71 0825	Suspended Solids	17 Mg/L	5001	5006	
			Cadmium	0.01 Mg/L			
			Chromium	<0.01			
			Copper	<0.05			
			Iron	<0.1			
			Lead	<0.01			
			Manganese, Total	<0.05			
			Zinc	<0.1			
			03-24-71 1300	Secchi Disk	0.8 Ft.	5001	5001
				04-06-71 1130	Secchi Disk	1.3 Ft.	5001
		BOD (5 days)			0.5 Mg/L		
		04-21-71 1205	BOD (7 days)	0.8 Mg/L			
			Secchi Disk	0.8 Ft.	5001	5001	
		05-04-71 1105	Secchi Disk	0.8 Ft.	5001	5001	
			BOD (7 days)	1.3 Mg/L			
			Suspended Solids	38 Mg/L	5001	5006	
			Cadmium, Total	0.01 Mg/L			
			Chromium	<0.01 Mg/L			
			Copper, Total	<0.05 Mg/L			
			Iron	<0.1 Mg/L			
			Lead, Total	<0.01 Mg/L			
			Manganese	<0.05 Mg/L			
			Zinc, Total	<0.01 Mg/L			
			05-19-71 1245	Secchi Disk	1.0 Ft.	5001	5001
		06-02-71 1105		Secchi Disk	1.1 Ft.	5001	5001
			BOD (7 days)	1.1 Mg/L			
			Suspended Solids	42 Mg/L	5001	5006	
			Volatile Suspended Solids	10 Mg/L			
			Cadmium, Total	<0.01 Mg/L			
			Chromium	<0.01 Mg/L			
			Copper, Total	0.07 Mg/L			
Iron	<0.1 Mg/L						
Lead, Total	<0.01 Mg/L						
Manganese	<0.05 Mg/L						
Zinc, Total	0.03 Mg/L						
06-16-71 1100	Secchi Disk	1.2 Ft.	5001	5001			
	06-30-71 0925	Secchi Disk	1.5 Ft.	5001	5001		
BOD (7 days)		2.8 Mg/L					
Suspended Solids		30 Mg/L	5001	5006			
Volatile Suspended Solids		5 Mg/L					
Cadmium, Total		<0.01 Mg/L					
Chromium		<0.01 Mg/L					
Copper, Total		<0.05 Mg/L					
Iron		<0.1 Mg/L					
Lead, Total		<0.01 Mg/L					
Manganese		<0.05 Mg/L					
Zinc, Total	0.04 Mg/L						
07-15-71 1115	Secchi Disk	2.3 Ft.	5001	5001			
	08-03-71 1345	Secchi Disk	1.9 Ft.	5001	5001		
BOD (7 days)		1.9 Mg/L					
Suspended Solids		16 Mg/L	5001	5006			
Volatile Suspended Solids		3 Mg/L					
Cadmium, Total		<0.01 Mg/L					
Chromium		<0.01 Mg/L					
Copper, Total		0.06 Mg/L					
Iron		0.2 Mg/L					
Lead, Total		<0.01 Mg/L					
Manganese		<0.05 Mg/L					
Zinc, Total	0.03 Mg/L						
08-17-71 1535	Secchi Disk	1.5 Ft.	5001	5001			
	08-31-71 1245	Secchi Disk	0.9 Ft.	5001	5001		
BOD (7 days)		1.7 Mg/L					
Suspended Solids		93 Mg/L	5001	5006			
Volatile Suspended Solids		10 Mg/L					
09-15-71 1415	Secchi Disk	2.2 Ft.	5001	5001			
	09-28-71 1050	Secchi Disk	1.3 Ft.	5001	5001		
BOD (7 days)		1.1 Mg/L					
Suspended Solids		18 Mg/L	5001	5006			
Volatile Suspended Solids	6 Mg/L						

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lob
EO B 802.5 208.1	SUISUN BAY AT BENICIA (MIDDLE OF PIER)	06-03-71 1015	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.0 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.2 Ug/L		
Selenium	0.00 Mg/L					
EO B 802.8 155.0	SACRAMENTO RIVER AT CHIPPS ISLAND	10-07-70 1200	Secchi Disk	0.7 Ft.	5001	5001
			BOD (5 days)	1.4 Mg/L		
			Suspended Solids	87 Mg/L		
		11-20-70 1130	Secchi Disk	1.3 Ft.	5001	5001
			BOD (5 days)	0.7 Mg/L		
			Suspended Solids	18 Mg/L		
		03-04-71 1000	Cadmium	<0.01 Mg/L	5001	5006
			Chromium	<0.01 Mg/L		
			Copper	<0.05 Mg/L		
			Iron	<0.1 Mg/L		
			Lead	<0.01 Mg/L		
			Manganese, Total	<0.05 Mg/L		
			Zinc	<0.1 Mg/L		
			Secchi Disk	0.9 Ft.		
		BOD (7 days)	1.2 Mg/L			
		03-24-71 1345	Suspended Solids	45 Mg/L	5001	5006
			Secchi Disk	0.8 Ft.		
		04-06-71 1245	Secchi Disk	0.8 Ft.	5001	5001
			BOD (5 days)	1.4 Mg/L		
			BOD (7 days)	1.6 Mg/L		
		04-21-71 1255	Secchi Disk	1.0 Ft.	5001	5001
		05-04-71 1305	Secchi Disk	1.4 Ft.	5001	5001
			BOD (7 days)	1.3 Mg/L		
			Suspended Solids	30 Mg/L		
			Cadmium, Total	<0.01 Mg/L		
			Chromium	<0.01 Mg/L		
			Copper, Total	<0.05 Mg/L		
			Iron	<0.1 Mg/L		
			Lead, Total	<0.01 Mg/L		
		Manganese	<0.05 Mg/L			
		05-19-71 1335	Secchi Disk	1.1 Ft.	5001	5001
06-02-71 1235	Secchi Disk	1.4 Ft.	5001	5001		
	BOD (7 days)	1.4 Mg/L				
	Suspended Solids	36 Mg/L				
	Volatile Suspended Solids	9 Mg/L				
	Cadmium, Total	<0.01 Mg/L				
	Chromium	<0.01 Mg/L				
	Copper, Total	0.06 Mg/L				
	Iron	<0.1 Mg/L				
	Lead, Total	<0.01 Mg/L				
	Manganese	<0.05 Mg/L				
	Zinc, Total	0.03 Mg/L				
06-16-71 1150	Secchi Disk	1.3 Ft.	5001	5001		
06-30-71 1105	Secchi Disk	1.2 Ft.	5001	5006		
	BOD (7 days)	1.7 Mg/L				
	Suspended Solids	34 Mg/L				
	Volatile Suspended Solids	5 Mg/L				
	Cadmium, Total	<0.01 Mg/L				
	Chromium	<0.01 Mg/L				
	Copper, Total	<0.05 Mg/L				
	Iron	0.1 Mg/L				
	Lead, Total	<0.01 Mg/L				
	Manganese	<0.05 Mg/L				
	Zinc, Total	<0.01 Mg/L				
07-15-71 1205	Secchi Disk	1.3 Ft.	5001	5001		
08-03-71 1520	Secchi Disk	0.8 Ft.	5001	5001		
	BOD (7 days)	1.7 Mg/L				
	Suspended Solids	57 Mg/L				
	Volatile Suspended Solids	6 Mg/L				
	Cadmium, Total	<0.01 Mg/L				
	Chromium	<0.01 Mg/L				
	Copper, Total	0.05 Mg/L				
	Iron	0.1 Mg/L				
	Lead, Total	<0.01 Mg/L				
	Manganese	<0.05 Mg/L				
	Zinc, Total	0.03 Mg/L				
08-31-71 1430	Secchi Disk	1.2 Ft.	5001	5001		
	BOD (7 days)	1.4 Mg/L				
	Suspended Solids	60 Mg/L				
	Volatile Suspended Solids	5 Mg/L	5001	5006		

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents	Samp	Lob		
EO B 802.8 155.0	SACRAMENTO RIVER AT CHIPPS ISLAND (Continued)	09-15-71 1500	Secchi Disk	0.8 Ft.	5001	5001	
			Cadmium, Total	<0.01 Mg/L	5001	5006	
			Chromium	<0.01 Mg/L			
			Copper, Total	<0.05 Mg/L			
			Iron	0.1 Mg/L			
			Lead, Total	<0.01 Mg/L			
			Manganese	<0.05 Mg/L			
			Zinc, Total	0.02 Mg/L			
			09-28-71 1230	Secchi Disk	1.3 Ft.	5001	5001
				BOD (7 days)	1.2 Mg/L		
		Suspended Solids	26 Mg/L	5001	5006		
		Volatile Suspended Solids	5 Mg/L				
EO B 803.2 204.8	SUISUN BAY ABOVE AVON PIER	10-09-70 1235	Secchi Disk	1.2 Ft.	5001	5001	
		03-04-71 0845	Secchi Disk	1.1 Ft.	5001	5001	
			BOD (5 days)	1.8 Mg/L			
EO B 803.5 217.0	SAN PABLO BAY NEAR RODEO	03-24-71 1200	Secchi Disk	2.0 Ft.	5001	5001	
			BOD (5 days)	0.5 Mg/L			
			BOD (7 days)	1.2 Mg/L			
		04-21-71 1120	Secchi Disk	1.2 Ft.	5001	5001	
			BOD (7 days)	1.1 Mg/L			
		05-19-71 1200	Secchi Disk	1.1 Ft.	5001	5001	
			BOD (7 days)	2.0 Mg/L			
			Suspended Solids	34 Mg/L	5001	5006	
			Volatile Suspended Solids	4 Mg/L			
		06-06-71 1005	Secchi Disk	1.8 Ft.	5001	5001	
			Suspended Solids	27 Mg/L	5001	5006	
			Volatile Suspended Solids	7 Mg/L			
		07-15-71 1025	Secchi Disk	1.7 Ft.	5001	5001	
			BOD (7 days)	1.0 Mg/L			
			Suspended Solids	31 Mg/L	5001	5006	
	Volatile Suspended Solids	2 Mg/L					
08-17-71 1500	Secchi Disk	1.3 Ft.	5001	5001			
	BOD (7 days)	1.3 Mg/L					
	Suspended Solids	39 Mg/L	5001	5006			
	Volatile Suspended Solids	5 Mg/L					
09-15-71 1340	Secchi Disk	2.1 Ft.	5001	5001			
	BOD (7 days)	0.9 Mg/L					
	Suspended Solids	11 Mg/L	5001	5006			
	Volatile Suspended Solids	5 Mg/L					
EO B 803.6 159.3	SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS	10-09-70 1310	Secchi Disk	0.8 Ft.	5001	5001	
			BOD (5 days)	1.7 Mg/L			
		03-04-71 0915	Secchi Disk	0.7 Ft.	5001	5001	
		05-04-71 1215	Secchi Disk	0.8 Ft.	5001	5001	
		06-02-71 1150	Secchi Disk	1.3 Ft.	5001	5001	
		06-30-71 1020	Secchi Disk	0.8 Ft.	5001	5001	
		08-03-71 1435	Secchi Disk	0.9 Ft.	5001	5001	
		08-31-71 1340	Secchi Disk	0.8 Ft.	5001	5001	
		09-28-71 1145	Secchi Disk	1.0 Ft.	5001	5001	
EO B 804.0 203.0	SUISUN BAY NEAR PRESTON POINT	10-09-70 1245	Secchi Disk	0.9 Ft.	5001	5001	
			BOD (5 days)	2.0 Mg/L			
		03-04-71 0900	Secchi Disk	0.6 Ft.	5001	5001	
		05-04-71 1150	Secchi Disk	0.3 Ft.	5001	5001	
			Cadmium, Total	0.01 Mg/L	5001	5006	
			Chromium	<0.01 Mg/L			
			Copper, Total	<0.05 Mg/L			
			Iron	<0.1 Mg/L			
			Lead, Total	<0.01 Mg/L			
			Manganese	<0.05 Mg/L			
	Zinc, Total	0.1 Mg/L					
06-02-71 1130	Secchi Disk	1.1 Ft.	5001	5001			
	Cadmium, Total	<0.01 Mg/L	5001	5006			
	Chromium	<0.01 Mg/L					
	Copper, Total	0.06 Mg/L					
	Iron	0.1 Mg/L					
	Lead, Total	<0.01 Mg/L					
	Manganese	<0.05 Mg/L					
	Zinc, Total	0.03 Mg/L					

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents	Samp	Lab			
EO B 804.0 203.0	SUISUN BAY NEAR PRESTON POINT (Continued)	06-30-71 0955	Secchi Disk	0.8 Ft.	5001	5001		
			Cadmium, Total	<0.01 Mg/L	5001	5006		
			Chromium	<0.01 Mg/L				
					Copper, Total	<0.05 Mg/L		
					Iron	<0.1 Mg/L		
					Lead, Total	<0.01 Mg/L		
					Manganese	<0.05 Mg/L		
					Zinc, Total	0.04 Mg/L		
				08-03-71 1415	Secchi Disk	1.0 Ft.	5001	5001
					Cadmium, Total	<0.01 Mg/L	5001	5006
					Chromium	<0.01 Mg/L		
					Copper, Total	0.06 Mg/L		
					Iron	<0.1 Mg/L		
					Lead, Total	<0.01 Mg/L		
					Manganese	<0.05 Mg/L		
			Zinc, Total	0.04				
		08-31-71 1310	Secchi Disk	0.7 Ft.	5001	5001		
		09-28-71 1115	Secchi Disk	0.8 Ft.	5001	5001		
EO B 804.4 156.2	HONKER BAY NEAR WHEELER POINT	10-09-70 1330	Secchi Disk	0.7 Ft.	5001	5001		
			BOD (5 days)	1.7 Mg/L				
		03-04-71 0935	Secchi Disk	0.8 Ft.	5001	5001		
			BOD (7 days)	1.3 Mg/L				
			Suspended Solids	39 Mg/L	5001	5006		
		03-23-71 1135	Secchi Disk	0.8 Ft.	5001	5001		
		04-06-71 1215	Secchi Disk	1.0 Ft.	5001	5001		
			BOD (5 days)	0.6 Mg/L				
			BOD (7 days)	1.4 Mg/L				
		04-20-71 1030	Secchi Disk	0.9 Ft.	5001	5001		
		05-04-71 1240	Secchi Disk	1.2 Ft.	5001	5001		
			BOD (7 days)	3.0 Mg/L				
			Suspended Solids	32 Mg/L	5001	5006		
		05-18-71 1020	Secchi Disk	0.8 Ft.	5001	5001		
		06-02-71 1210	Secchi Disk	1.3 Ft.	5001	5001		
			BOD (7 days)	1.5 Mg/L				
			Suspended Solids	54 Mg/L	5001	5006		
			Volatile Suspended Solids	10 Mg/L				
06-15-71 0940	Secchi Disk	1.0 Ft.	5001	5001				
06-30-71 1035	Secchi Disk	0.8 Ft.	5001	5001				
	BOD (7 days)	1.8 Mg/L						
	Suspended Solids	50 Mg/L	5001	5006				
	Volatile Suspended Solids	5 Mg/L						
07-14-71 0835	Secchi Disk	0.7 Ft.	5001	5001				
08-03-71 1455	Secchi Disk	0.8 Ft.	5001	5001				
	BOD (7 days)	1.7 Mg/L						
	Suspended Solids	72 Mg/L	5001	5006				
	Volatile Suspended Solids	10 Mg/L						
08-16-71 1245	Secchi Disk	0.8 Ft.	5001	5001				
08-31-71 1400	Secchi Disk	0.7 Ft.	5001	5001				
	BOD (7 days)	1.2 Mg/L						
	Suspended Solids	87 Mg/L	5001	5006				
	Volatile Suspended Solids	10 Mg/L						
09-14-71 1310	Secchi Disk	1.0 Ft.	5001	5001				
09-28-71 1200	Secchi Disk	1.1 Ft.	5001	5001				
	BOD (7 days)	1.3 Mg/L						
	Suspended Solids	44 Mg/L	5001	5006				
	Volatile Suspended Solids	8 Mg/L						
EO B 805.3 226.3	SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER	03-24-71 1100	Secchi Disk	1.4 Ft.	5001	5001		
			BOD (5 days)	0.5 Mg/L				
			BOD (7 days)	0.5 Mg/L				
		04-21-71 1015	Secchi Disk	1.1 Ft.	5001	5001		
			BOD (7 days)	1.2 Mg/L				
		05-19-71 1050	Secchi Disk	0.8 Ft.	5001	5001		
			BOD (7 days)	1.7 Mg/L				
			Suspended Solids	38 Mg/L	5001	5006		
			Volatile Suspended Solids	6 Mg/L				
		06-16-71 0840	Secchi Disk	1.8 Ft.	5001	5001		
			Suspended Solids	16 Mg/L	5001	5006		
			Volatile Suspended Solids	0 Mg/L				

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lab		
EO B 805.3 226.3	SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER (Continued)	07-15-71 0915	Secchi Disk	1.5 Ft.	5001	5001		
			BOD (7 days)	2.2 Mg/L				
			Suspended Solids	32 Mg/L	5001	5006		
					Volatile Suspended Solids	3 Mg/L		
		08-17-71 1335	Secchi Disk	0.8 Ft.	5001	5001		
			BOD (7 days)	1.5 Mg/L				
			Suspended Solids	19 Mg/L	5001	5006		
					Volatile Suspended Solids	8 Mg/L		
		09-15-71 1240	Secchi Disk	3.5 Ft.	5001	5001		
			BOD (7 days)	2.3 Mg/L				
			Suspended Solids	10 Mg/L	5001	5006		
					Volatile Suspended Solids	5 Mg/L		
EO B 807.0 202.3	GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH	10-07-70 1000	Secchi Disk	0.4 Ft.	5001	5001		
			BOD (5 days)	1.9 Mg/L				
			Suspended Solids	24.5 Mg/L	5001	5006		
		11-20-70 1000	Secchi Disk	0.7 Ft.	5001	5001		
			BOD (5 days)	0.8 Mg/L				
			Suspended Solids	65 Mg/L	5001	5006		
		03-04-71 0755	Secchi Disk	0.6 Ft.	5001	5001		
			BOD (7 days)	0.9 Mg/L				
			Suspended Solids	43 Mg/L	5001	5006		
		03-23-71 1030	Secchi Disk	1.0 Ft.	5001	5001		
		04-06-71 1030	Secchi Disk	0.8 Ft.	5001	5001		
			BOD (5 days)	0.9 Mg/L				
			BOD (7 days)	1.0 Mg/L				
		04-20-71 0955	Secchi Disk	0.4 Ft.	5001	5001		
		05-04-71 1015	Secchi Disk	0.7 Ft.	5001	5001		
			BOD (7 days)	1.1 Mg/L				
			Suspended Solids	88 Mg/L	5001	5006		
			Cadmium, Total	0.01 Mg/L				
			Chromium	<0.01 Mg/L				
			Copper, Total	<0.05 Mg/L				
			Iron	<0.1 Mg/L				
			Lead, Total	<0.01 Mg/L				
			Manganese	<0.05 Mg/L				
			Zinc, Total	<0.01 Mg/L				
		05-18-71 0920	Secchi Disk	0.7 Ft.	5001	5001		
		06-02-71 1020	Secchi Disk	0.7 Ft.	5001	5001		
			BOD (7 days)	1.7 Mg/L				
			Suspended Solids	84 Mg/L	5001	5006		
			Volatile Suspended Solids	10 Mg/L				
			Cadmium, Total	<0.01 Mg/L				
Chromium	<0.01 Mg/L							
Copper, Total	0.06 Mg/L							
Iron	<0.1 Mg/L							
Lead, Total	<0.01 Mg/L							
Manganese	<0.05 Mg/L							
Zinc, Total	0.03 Mg/L							
06-15-71 0900	Secchi Disk	0.8 Ft.	5001	5001				
06-30-71 0835	Secchi Disk	0.6 Ft.	5001	5001				
	BOD (7 days)	1.9 Mg/L						
	Suspended Solids	95 Mg/L	5001	5006				
	Volatile Suspended Solids	10 Mg/L						
	Cadmium, Total	<0.01 Mg/L						
	Chromium	<0.01 Mg/L						
	Copper, Total	<0.05 Mg/L						
	Iron	<0.1 Mg/L						
	Lead, Total	<0.01 Mg/L						
	Manganese	<0.05 Mg/L						
Zinc, Total	0.04 Mg/L							
07-14-71 0745	Secchi Disk	0.8 Ft.	5001	5001				
08-03-71 1300	Secchi Disk	0.8 Ft.	5001	5001				
	BOD (7 days)	2.6 Mg/L						
	Suspended Solids	68 Mg/L	5001	5006				
	Volatile Suspended Solids	9 Mg/L						
	Cadmium, Total	<0.01 Mg/L						
	Chromium	<0.01 Mg/L						
	Copper, Total	0.09 Mg/L						
	Iron	0.2 Mg/L						
	Lead, Total	<0.01 Mg/L						
	Manganese	<0.05 Mg/L						
Zinc, Total	0.05 Mg/L							
08-16-71 1200	Secchi Disk	0.7 Ft.	5001	5001				
08-31-71 1200	Secchi Disk	0.6 Ft.	5001	5001				
	BOD (7 days)	1.0 Mg/L						

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lob	
EO B 807.0 202.3	GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH (Continued)	08-31-71	Suspended Solids	47	Mg/L	5001	5006
		1200	Volatile Suspended Solids	7	Mg/L		
		09-14-71	Secchi Disk	0.7	Ft.	5001	5001
		1200	Cadmium, Total	<0.01	Mg/L	5001	5006
			Chromium	<0.01	Mg/L		
			Copper, Total	<0.05	Mg/L		
			Iron	<0.1	Mg/L		
			Lead, Total	<0.01	Mg/L		
			Manganese	<0.05	Mg/L		
			Zinc, Total	0.02	Mg/L		
		09-28-71	Secchi Disk	0.8	Ft.	5001	5001
		0950	BOD (7 days)	1.5	Mg/L		
			Suspended Solids	35	Mg/L	5001	5006
	Volatile Suspended Solids	4	Mg/L				
EO S 809.2 205.3	CORDELLA SLOUGH AT CYGNUS	10-07-70	Secchi Disk	0.5	Ft.	5001	5001
		0840	BOD (5 days)	1.9	Mg/L		
		11-06-70	Secchi Disk	0.7	Ft.	5001	5001
		0920	BOD (5 days)	1.4	Mg/L		
			Suspended Solids	109	Mg/L	5001	5006
		12-09-70	Secchi Disk	0.5	Ft.	5001	5001
		1040	BOD (5 days)	2.7	Mg/L		
		01-06-71	Secchi Disk	0.6	Ft.	5001	5001
		1020	BOD (5 days)	1.8	Mg/L		
		02-05-71	Secchi Disk	0.5	Ft.	5001	5001
			BOD (5 days)	1.1	Mg/L		
			BOD (7 days)	1.6	Mg/L		
		03-05-71	Secchi Disk	0.4	Ft.	5001	5001
			BOD (5 days)	1.4	Mg/L		
			BOD (7 days)	1.8	Mg/L		
		04-05-71	Secchi Disk	0.4	Ft.	5001	5001
		1020					
		05-17-71	Secchi Disk	0.5	Ft.	5001	5001
		1115	BOD (5 days)	2.9	Mg/L		
	Suspended Solids	193	Mg/L	5001	5006		
	Volatile Suspended Solids	20	Mg/L				
06-18-71	Secchi Disk	0.4	Ft.	5001	5001		
1015	BOD (5 days)	2.8	Mg/L				
07-30-71	Secchi Disk	0.7	Ft.	5001	5001		
1005	BOD (5 days)	2.0	Mg/L				
08-27-71	Secchi Disk	0.5	Ft.	5001	5001		
0900	Suspended Solids	62	Mg/L	5001	5006		
	Volatile Suspended Solids	2	Mg/L				
09-27-71	Secchi Disk	0.4	Ft.	5001	5001		
1000	BOD (7 days)	1.9	Mg/L				
EO S 810.8 202.8	SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND	10-07-70	Secchi Disk	0.5	Ft.	5001	5001
		1040	BOD (5 days)	1.6	Mg/L		
		11-06-70	Secchi Disk	0.6	Ft.	5001	5001
		1215	BOD (5 days)	1.4	Mg/L		
			Suspended Solids	72	Mg/L	5001	5006
		12-09-70	Secchi Disk	0.5	Ft.	5001	5001
		1305	BOD (5 days)	2.5	Mg/L		
		01-06-71	Secchi Disk	0.6	Ft.	5001	5001
		1245	BOD (5 days)	1.5	Mg/L		
		02-05-71	Secchi Disk	0.4	Ft.	5001	5001
			BOD (5 days)	1.3	Mg/L		
			BOD (7 days)	1.8	Mg/L		
		03-05-71	Secchi Disk	0.4	Ft.	5001	5001
			BOD (5 days)	1.7	Mg/L		
			BOD (7 days)	2.4	Mg/L		
		04-05-71	Secchi Disk	0.5	Ft.	5001	5001
		1305					
		05-17-71	Secchi Disk	0.7	Ft.	5001	5001
		1405	BOD (5 days)	2.8	Mg/L		
	Suspended Solids	112	Mg/L	5001	5006		
	Volatile Suspended Solids	16	Mg/L				
06-18-71	Secchi Disk	0.4	Ft.	5001	5001		
1240	BOD (5 days)	3.1	Mg/L				
07-30-71	Secchi Disk	0.5	Ft.	5001	5001		
1230	BOD (5 days)	2.2	Mg/L				
08-27-71	Secchi Disk	0.7	Ft.	5001	5001		
1240	Suspended Solids	29	Mg/L	5001	5006		
	Volatile Suspended Solids	3	Mg/L				
09-27-71	Secchi Disk	0.7	Ft.	5001	5001		
1250	BOD (7 days)	2.6	Mg/L				

TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lab	
EO S 811.0 204.8	CHADBOURNE SLOUGH AT CHADBOURNE ROAD NEAR SUI SUN	10-07-70	Secchi Disk	0.8 Ft.	5001	5001	
		0950	BOD (5 days)	1.5 Mg/L			
		11-06-70	1040	Secchi Disk	0.7 Ft.	5001	5001
				BOD (5 days)	2.0 Mg/L		
		12-09-70	1215	Suspended Solids	77 Mg/L	5001	5006
				Secchi Disk	0.6 Ft.	5001	5001
		01-06-71	1110	BOD (5 days)	3.1 Mg/L		
				Secchi Disk	0.6 Ft.	5001	5001
		02-05-71	1120	BOD (5 days)	1.4 Mg/L		
				Secchi Disk	0.4 Ft.	5001	5001
		03-05-71	1015	BOD (5 days)	1.2 Mg/L		
				BOD (7 days)	1.8 Mg/L		
		04-05-71	1155	Secchi Disk	0.5 Ft.	5001	5001
				BOD (5 days)	2.0 Mg/L		
		05-17-71	1250	BOD (7 days)	9.3 Mg/L		
				Secchi Disk	0.4 Ft.	5001	5001
		06-18-71	1135	BOD (5 days)	0.5 Ft.	5001	5001
				Secchi Disk	4.4 Mg/L		
		07-30-71	1120	Suspended Solids	187 Mg/L	5001	5006
				Volatile Suspended Solids	17 Mg/L		
08-27-71	1115	Secchi Disk	0.4 Ft.	5001	5001		
		BOD (5 days)	2.2 Mg/L				
09-27-71	1115	Secchi Disk	0.4 Ft.	5001	5001		
		BOD (5 days)	2.1 Mg/L				
08-27-71	1115	Secchi Disk	0.5 Ft.	5001	5001		
		Suspended Solids	103 Mg/L				
09-27-71	1115	Volatile Suspended Solids	10 Mg/L	5001	5006		
		Secchi Disk	0.8 Ft.	5001	5001		
09-27-71	1115	BOD (7 days)	2.0 Mg/L				
		EO S 811.2 158.5	MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD				
10-07-70	1110	Secchi Disk	0.8 Ft.	5001	5001		
		BOD (5 days)	1.6 Mg/L				
11-06-70	1300	Secchi Disk	0.7 Ft.	5001	5001		
		BOD (5 days)	1.4 Mg/L				
12-09-70	1345	Suspended Solids	61 Mg/L	5001	5006		
		Secchi Disk	0.7 Ft.	5001	5001		
01-06-71	1320	BOD (5 days)	2.9 Mg/L				
		Secchi Disk	0.7 Ft.	5001	5001		
02-05-71	1340	BOD (5 days)	1.3 Mg/L				
		BOD (7 days)	1.8 Mg/L				
03-05-71	1220	Secchi Disk	0.4 Ft.	5001	5001		
		BOD (5 days)	1.7 Mg/L				
04-05-71	1345	BOD (7 days)	2.4 Mg/L				
		Secchi Disk	0.7 Ft.	5001	5001		
05-17-71	1450	Secchi Disk	0.5 Ft.	5001	5001		
		BOD (5 days)	1.8 Mg/L				
06-18-71	1320	Suspended Solids	98 Mg/L	5001	5006		
		Volatile Suspended Solids	11 Mg/L				
07-30-71	1310	Secchi Disk	0.5 Ft.	5001	5001		
		BOD (5 days)	7.7 Mg/L				
08-27-71	1330	Secchi Disk	0.7 Ft.	5001	5001		
		Suspended Solids	67 Mg/L				
09-27-71	1320	Volatile Suspended Solids	6 Mg/L	5001	5006		
		Secchi Disk	0.6 Ft.	5001	5001		
10-07-70	0910	BOD (7 days)	1.8 Mg/L				
		EO S 811.5 207.2	CORDELIA SLOUGH AT UPPER END NEAR CORDELIA				
04-05-71	1120	Secchi Disk	1.0 Ft.	5001	5001		
		BOD (5 days)	1.2 Mg/L				
05-17-71	1205	Secchi Disk	0.7 Ft.	5001	5001		
		BOD (5 days)	2.5 Mg/L				
06-18-71	1100	Suspended Solids	141 Mg/L	5001	5006		
		Volatile Suspended Solids	17 Mg/L				
07-30-71	1040	Secchi Disk	0.5 Ft.	5001	5001		
		BOD (5 days)	2.6 Mg/L				
07-30-71	1040	Secchi Disk	0.3 Ft.	5001	5001		
		BOD (5 days)	2.3 Mg/L				

		04-05-7 1415						
		06-18-7 1345						
		07-30-7 1335						
		08-27-7 1400						
		09-27-7 1345						
E3 1250.00	NAPA RIVER NEAR NAPA	05-13-7 1100						
E3 2100.51	GREEN VALLEY CREEK AT CORDELIA	11-06-7 1005						
		12-09-7 1115						
		01-06-7 1040						
		02-05-7 1030						
		03-05-7 0950						
E4 4180.01	WALNUT CREEK AT HIGHWAY 4	06-09-7 0900						
E5 1400.00	ARROYO VALLE NEAR LIVERMORE	06-09-7 1000	Barium	0.0	Mg/L			
			Cadmium	0.00	Mg/L			
			Lead	0.00	Mg/L			
			Mercury, Total	0.2	Ug/L			
			Selenium	0.00	Mg/L			
E6 5100.00	SARATOGA CREEK AT SARATOGA	06-09-7 1120	Arsenic	0.00	Mg/L	5050	5050	
			Barium	0.1	Mg/L			
			Cadmium	0.00	Mg/L			
			Lead	0.00	Mg/L			
			Mercury, Total	0.1	Ug/L			
			Selenium	0.00	Mg/L			
F8 2100.00	NAVARRO RIVER NEAR NAVARRO	05-05-7 --	Arsenic	0.00	Mg/L	5050	5050	
			Barium	0.0	Mg/L			
			Cadmium	0.00	Mg/L			
			Lead	0.00	Mg/L			
			Mercury	0.0	Ug/L			
			Selenium	0.00	Mg/L			



TABLE D-3 (Cont.)

## MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Station Number	Station	Date Time	Constituents		Samp	Lab
F8 3100.00	NOYO RIVER NEAR FORT BRAGG	05-05-71 --	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.0 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury	0.0 Ug/L		
			Selenium	0.00 Mg/L		
F9 1100.00	RUSSIAN RIVER NEAR GUERNEVILLE	05-13-71 0800	Arsenic	0.00 Mg/L	5050	5050
			Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.00 Mg/L		
F9 1765.00	RUSSIAN RIVER NEAR HOPLAND	05-20-71 1630	Arsenic	0.00 Mg/L	5000	5050
			Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.00 Mg/L		
F9 1850.00	RUSSIAN RIVER NEAR UKLAH	05-20-71 1300	Arsenic	0.00 Mg/L	5000	5050
			Barium	0.1 Mg/L		
			Cadmium	0.00 Mg/L		
			Lead	0.00 Mg/L		
			Mercury, Total	0.0 Ug/L		
			Selenium	0.00 Mg/L		

TABLE D-4

NUTRIENT ANALYSIS OF SURFACE WATER

Lab and Sampler Agency Codes

5000	-	U. S. Geological Survey
5001	-	U. S. Bureau of Reclamation
5050	-	Department of Water Resources
5063	-	Santa Cruz County Health Department

Abbreviations

TIME	-	Pacific Standard Time on a 24-hour clock
G.H.	-	Instantaneous gage height in feet above an established datum
Q	-	Instantaneous discharge measured in cubic feet per second
TEMP	-	Water temperature in degrees Fahrenheit (F) or Celsius (C)
TURB	-	Jackson Turbidity Units measured with a Hellege Turbidimeter (E) or a Hach Nephelometer (A)
PH	-	Measure of acidity or alkalinity of water
EC	-	Electrical conductance in micromhos at 25° C
HCO3	-	Bicarbonate
CO3	-	Carbonate

Nitrogen Series as N

NO2	-	Unfiltered nitrite
NH3	-	Unfiltered ammonia
NO3	-	Unfiltered nitrate
ORG N	-	Organic nitrogen
DIS ORG N	-	Dissolved organic nitrogen
NH3 + ORG N	-	Ammonia plus organic nitrogen

Phosphorus Series as P

FIL A.H.P04	-	Filterable acid hydrolyzable phosphate
F P04	-	Filterable orthophosphate
U P04	-	Unfiltered orthophosphate
F TOT P	-	Filterable total phosphorus
U TOT P	-	Unfiltered total phosphorus

TABLE D-4 (CONTINUED)  
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. Q	TEMP TURB	FIELD LABORATORY PH EC	LAR HC03 CO3	NO2 NH3	NUTRIENT NO3 ORG N	CONSTITUENTS DIS ORG N	IN MILLIGRAMS NH3 + DWG N	PER FIL. A.M.P04	LITER F P04 U P04	F TOT P U TOT P
DO 1100.00 BRANCIFORTE CREEK AT SANTA CRUZ												
3/15/71 1530	5063 5050		54 F 30E	7.5 273 7.7 262	71 0						0.08	
9/27/71 1230	5063 5050		57.0F 30E	8.0 485 8.1 469	186 0						0.17	
DO 1180.01 SAN LORENZO RIVER AT PARADISE PARK												
3/15/71 1200	5063 5050		52 F 35E	7.8 289 7.8 297	100 0						0.08	
9/27/71 1010	5063 5050		54.0F 3E	7.9 350 8.0 354	132 0						0.16	
DO 1220.01 ZAYANTE CREEK AT FELTON												
3/15/71 1110	5063 5050		51 F 550E	7.7 372 7.9 367	119 0						0.20	
9/27/71 0940	5063 5050		52.0F 2E	7.8 380 8.1 377	126 0						0.33	
DO 1498.01 SAN LORENZO RIVER AT ROULDER CREEK												
3/15/71 1000	5063 5050	2.22 3.5	47 F 80E	7.6 315 7.8 306	98 0						0.05	
9/27/71 0900	5063 5050		54.0F 15E	7.8 520 8.1 514	184 0						0.10	
DO 2020.00 APTOS CREEK BELOW VALENCIA CREEK AT APTOS												
3/15/71 1350	5063 5050	3.24 5.3	53 F 100E	8.1 555 8.3 550	208 0						0.13	
9/27/71 1350	5063 5050		57.0F 2E	8.3 670 8.4 863	306 5						0.21	
DO 3100.00 SOQUEL CREEK AT SOQUEL												
3/15/71 1430	5063 5050	2.86 35	58 F 12E	8.1 538 8.1 525	174 0						0.06	
9/27/71 1300	5063 5050	2.48	66.0F 1E	8.4 710 8.5 705	224 6						0.14	
DO 4010.01 SCOTT CREEK AT HIGHWAY 1 NEAR DAVENPORT												
3/15/71 0900	5063 5050		48 F 15E	7.1 173 7.5 212	58 0						0.02	
9/27/71 0750	5063 5050		53.0F 2F	7.4 1150 7.8 611	114 0						0.07	
EO B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)												
3/16/71 1020	5050 5050		53 F 30E	8.0 37000 32200		0.08	0.54 1.4		0.38	0.04	0.20	0.28
4/13/71 0920	5050 5050		58 F 15E	8.1 36000 33700		0.02	0.43 0.2		0.22	0.00	0.18	0.23
6/23/71 0810	5050 5050		65 F 6E	8.3 39000 36400		0.00	0.45 0.4		0.4	0.00	0.34	0.46
7/08/71 0820	5050 5050		67 F 4E	8.2 40000 38100		0.00	0.12 0.2		0.2	0.04	0.26	0.31
8/10/71 1030	5050 5050		70 F 8E	8.0 39500		0.00	0.26 0.3		0.3	0.06	0.30	0.36
9/21/71 0915	5050 5050		70 F 9E	8.1 41900		0.00	0.36 0.1		0.1	0.01	0.39	0.46
EO B 736.2 211.6 SAN FRANCISCO BAY AT SAN MATEO BRIDGE												
10/21/70 1000	5050 5050		61 F 6E	7.9 42000 43700		0.51	0.31 1.4		1.91	0.03	0.33	0.38
11/17/70 0950	5050 5050		59 F 10E	8.2 41000 41800		0.06	0.39 0.2		0.26	0.00	0.26	0.28
12/16/70 0815	5050 5050		52 F 25E	7.7 32000 33000		0.16	2.8 0.0		0.16	0.08	0.15	0.24
1/28/71 0750	5050 5050		51 F 45E	8.0 30500 29100		0.08	0.43 0.0		0.08	0.01	0.13	0.14
2/17/71 1330	5050 5050		54 F 20E	8.0 33000 29200		0.08	0.49 0.3		0.38	0.04	0.17	0.21
5/11/71 0810	5050 5050		57.0F 40E	7.9 40000 31800		0.15	0.43 0.2		0.35	0.05	0.29	0.37
EO B 736.2 212.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)												
6/23/71 0845	5050 5050		65 F 8E	8.4 39000 37400		0.00	0.05 0.2		0.2	0.00	0.17	0.24
7/08/71 0915	5050 5050		65 F 3E	8.2 40000 38000		0.00	0.04 0.2		0.2	0.04	0.15	0.20
8/10/71 1115	5050 5050		70 F 9E	8.1 40100		0.00	0.12 0.2		0.2	0.06	0.23	0.31
9/21/71 1050	5050 5050		70 F 4E	8.3 41400		0.00	0.04 0.2		0.2	0.00	0.36	0.42

TABLE D-4 (CONTINUED)  
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. 0	TEMP TURB	FIELD LABORATORY PH	EC	LAR HCO3 CO3	NO2 NH3	NUTRIENT NO3 ORG N	CONSTITUENTS IN MILLIGRAMS PER LITER DIS ORG N	NH3 + ORG N	FIL. A.H.P04	LITER F P04 U P04	F TOT P U TOT P
E0 R 74R.1 222.4 SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND													
10/21/70 1030	5050 5050		59 F 4E	7.8	41000 41000			0.01	0.28 0.6	0.61	0.00	0.09	0.09
11/17/70 1100	5050 5050		58 F 8E	8.2	41000 40200		0.04	0.24 0.0	0.04	0.00	0.08	0.10	
12/16/70 1030	5050 5050		53 F 12E	7.9	31000 32500		0.00	4.0 0.2	0.2	0.02	0.07	0.10	
1/28/71 0730	5050 5050		50 F 20E	7.4	33000 30200		0.01	0.28 0.0	0.01	0.01	0.06	0.10	
2/17/71 1350	5050 5050		52 F 7E	7.9	34000 30500		0.00	0.31 0.1	0.1	0.02	0.06	0.08	
3/16/71 1005	5050 5050		52 F 7E	8.0	42000 37700		0.00	0.39 0.1	0.1	0.01	0.09	0.14	
4/13/71 0910	5050 5050		55 F 7E	8.1	36000 33900		0.05	0.30 0.1	0.15	0.00	0.06	0.09	
5/11/71 0812	5050 5050		60.5F 15E	8.0	35000 36800		0.09	0.31 0.0	0.09	0.08	0.10	0.18	
E0 R 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND													
6/23/71 0700	5050 5050		59 F 9E	8.2	40500 39200		0.01	0.36 0.2	0.21	0.00	0.10	0.15	
7/08/71 0640	5050 5050		61 F 7E	7.7	43000 39800		0.00	0.34 0.0	0.0	0.03	0.11	0.15	
8/10/71 0900	5050 5050		64 F 6E	7.9	41500		0.00	0.25 0.1	0.1	0.04	0.11	0.15	
9/21/71 0715	5050 5050		63 F 3E	7.9	40100		0.00	0.21 0.3	0.3	0.02	0.09	0.14	
E0 R 757.7 226.2 SAN PABLO STRAIT WEST OF THE BROTHERS													
10/21/70 1120	5050 5050		60 F 3E	7.9	35000 35500		0.01	0.29 0.5	0.51	0.00	0.08	0.08	
11/17/70 1145	5050 5050		59 F 6E	8.2	38000 35300		0.04	0.29 0.1	0.14	0.00	0.08	0.09	
12/16/70 1220	5050 5050		51 F 20E	7.5	13000 13700		0.05	3.0 0.3	0.35	0.03	0.06	0.10	
1/28/71 1000	5050 5050		50 F 25E	7.5	28000 25600		0.02	0.33 0.1	0.12	0.02	0.04	0.06	
2/17/71 1450	5050 5050		52 F 15E	7.8	21000 18500		0.05	0.33 0.5	0.55	0.02	0.06	0.08	
3/16/71 1050	5050 5050		53 F 10E	7.8	15000 22600		0.01	0.40 0.3	0.31	0.02	0.09	0.11	
4/13/71 1010	5050 5050		56 F 25E	7.8	21500 20100		0.06	0.23 0.0	0.06	0.03	0.05	0.08	
5/11/71 1000	5050 5050		59.0F 30E	7.8	20800 25200		0.12	0.23 0.0	0.12	0.02	0.07	0.09	
E0 R 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT													
3/24/71 1130	5001 5000		12 C 14A	7.7	38100		5.10	0.3 0.47	5.57		0.26	0.31	
4/21/71 1055	5001 5000		13 C 13A	7.8	27300	105 0	2.60	0.3 0.22	2.82		0.18	0.28	
5/19/71 1130	5001 5000		16 C 8A	7.9	25500	61 0	3.80	0.3 0.24	0.19	4.04	0.05	0.13	
6/16/71 0930	5001 5000		17 C 6A	7.5	27800	108 0	2.00	0.2 0.26	0.17	2.26	0.07	0.12	
7/14/71 0950	5001 5001		18 C 4A	7.8	32500	113 0	0.09	0.3			0.13	0.15	
8/17/71 1430	5001 5001		19 C 10A	8.1	36200	118 0	0.09	0.3			0.15	0.20	
9/15/71 1310	5001 5001		21 C 6A	7.8	34700	74 0	0.06	0.2			0.12	0.19	
E0 R 802.3 207.1 SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ													
10/07/70 1045	5001 5000		17 C 28A	7.7	15100		0.00	0.09 0.34	0.24	0.34	0.09	0.19	
11/20/70 1035	5001 5000		15 C 22A	7.6	16500		0.08	0.16 0.69	0.65	0.77	0.09	0.13	
3/04/71 0845	5001 5000		10 C 28A	6.7	14800	96 0	1.20	0.20 0.18	0.12	1.38	0.09	0.13	
4/06/71 1130	5001 5000		15 C 30A	7.7	7350	79 0	0.0	0.20 0.30	0.10	0.3	0.01	0.17	
5/04/71 1105	5001 5000		14 C 32A	7.5	14400	79 0	1.70	0.18 0.23	0.19	1.93	0.09	0.10	
6/02/71 1105	5001 5000		17 C 19A	7.8	7240	79 0	0.25	0.08 0.22	0.20	0.47	0.08	0.12	
6/30/71 0925	5001 5000		20 C 18A	7.5	10200	78 0		0.20			0.08	0.14	

TABLE D-4 (CONTINUED)  
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. Q	TEMP TURB	FIELD		LAB HC03 CO3	NO2 NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER				F TOT P U TOT P	
				LABORATORY PH	EC			DIS ORG N	NH3 + ORG N	FIL. A.H.P04	F P04 U P04		
EO B 802.3 207.1				SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ				CONTINUED					
8/03/71 1345	5001 5001		21 C 16A	8.0		80 0	0.05	0.16				0.09	0.18
8/31/71 1245	5001 5001		21 C 20A	7.9	17900	69 0	0.05	0.15	0.01			0.09	0.19
9/28/71 1050	5001 5001		18 C 22A	7.7	11900	90 0	0.06	0.15				0.06	0.06
EO B 802.8 155.0				SACRAMENTO RIVER AT CHIPPS ISLAND									
10/07/70 1200	5001 5000		17 C 55A	7.6			0.00	0.09 0.41	0.09	0.41		0.09	0.27
11/20/70 1130	5001 5000		14 C 28A	7.2	1550		0.02	0.29 0.71	0.48	0.73		0.08	0.14
3/04/71 1000	5001 5000		10 C 39A	6.8	361	79 0	0.18	0.30 0.42	0.38	0.6		0.06	0.12
4/06/71 1245	5001 5000		15 C 70A	7.5	663	64 0	0.0	0.10 0.25	0.05	0.25		0.02	0.18
5/04/71 1305	5001 5000		15 C 27A	7.5	140	62 0	0.10	0.0 0.18	0.18	0.28		0.06	0.12
6/02/71 1235	5001 5000		18 C 15A	7.6	179	70 0	0.0	0.05 0.22	0.24	0.22		0.04	0.09
6/30/71 1105	5001 5000		21 C 22A	7.5	172	60 0	0.0	0.03	0.04			0.04	0.09
8/03/71 1520	5001 5001		22 C 37A	8.0	251	64 0	0.01	0.01	0.0			0.04	0.15
8/31/71 1430	5001 5001		21 C 27A	8.0	2550	67 0	0.01	0.06				0.04	0.15
9/28/71 1230	5001 5001		18 C 26A	7.7	553	56 7	0.0	0.07				0.03	0.08
EO B 803.5.217.0				SAN PABLO BAY NEAR RODEO									
3/24/71 1200	5001 5000		14 C 30A	7.6			1.40	0.3 0.22		1.62		0.10	0.08
4/21/71 1120	5001 5000		13 C 55A	7.7	28000	95 0	0.05	0.2 0.28		0.33		0.10	0.21
5/19/71 1200	5001 5000		16 C 10A	7.8	20700	95 0	3.40	0.1 0.34	0.17	3.74		0.07	0.10
6/16/71 1005	5001 5000		21 C 13A	7.7	20900	99 0	0.27	0.2 0.25	0.18	0.52		0.05	0.12
7/15/71 1025	5001 5001		18 C 14A	7.7	19500	107 0	0.09	0.2				0.11	0.18
8/17/71 1500	5001 5001		21 C 22A	8.2	27900	102 0	0.08	0.2				0.11	0.17
9/15/71 1340	5001 5001		22 C 10A	7.6	27200	98 0	0.06	0.2				0.09	0.16
EO B 804.4 156.2				HONKER HAY NEAR WHEELER POINT									
3/04/71 0935	5001 5000		10 C 45A	6.8		78 0	0.13	0.30 0.24	0.14	0.37		0.02	0.17
4/06/71 1215	5001 5000		15 C 70A	7.5	609	63 0	0.03	0.0 0.20	0.12	0.23		0.01	0.17
5/04/71 1240	5001 5000		15 C 37A	7.5	140	64 0	0.02	0.03 0.27	0.21	0.29		0.04	0.10
6/02/71 1210	5001 5000		18 C 24A	7.8	174	70 0	0.0	0.08 0.29	0.41	0.29		0.04	0.10
6/30/71 1035	5001 5000		21 C 34A	7.5	175	60 0	0.01	0.03	0.01			0.04	0.11
8/03/71 1455	5001 5001		22 C 55A	7.9	332	64 0	0.01	0.02	0.01			0.03	0.16
8/31/71 1400	5001 5001		21 C 37A	8.0	3160	67 0	0.01	0.06				0.04	0.16
9/28/71 1200	5001 5001		18 C 33A	7.7	655	92 0	0.0	0.07				0.04	0.04
EO B 805.3 226.3				SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER									
3/24/71 1100	5001 5000		13 C 22A	7.4			2.90	0.4 0.20		3.1		0.19	0.34
4/21/71 1015	5001 5000		12 C 40A	7.6	24600	101 0	2.30	0.2 0.28		2.58		0.15	0.21
5/19/71 1050	5001 5000		17 C 16A	7.9	23100	141 0	2.20	0.1 0.21	0.18	2.41		0.09	0.10
6/16/71 0840	5001 5000		19 C 8A	7.5	24000	106 0	2.10	0.2 0.38	0.17	2.48		0.06	0.12
7/15/71 0915	5001 5001		19 C 10A	8.1	26700	106 0	0.05	0.1				0.18	0.22
8/17/71 1335	5001 5001		20 C 70A	8.1	30300	111 0	0.05	0.5				0.21	0.35

TABLE D-4 (CONTINUED)  
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAR	G.H. Q	TEMP TURB	FIELD LABORATORY PH	LAB HCO3 EC	NO2 NH3	NUTRIENT NO3 ORG N	CONSTITUENTS IN MILLIGRAMS PER LITER				F TOT P
								DIS ORG N	NH3 + ORG N	FIL. A.H.P04	F P04 U P04	F TOT P U TOT P
E0 R 805.3 226.3 SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER CONTINUED												
9/15/71 1240	5001 5001		25 C 14A	7.9	26800	141 0	0.03	0.1			0.11	0.21
E0 R 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH												
10/07/70 1000	5001 5000		16 C 140A	7.6	5470		0.00	0.05 0.63	0.24	0.63	0.08	0.36
11/20/70 1000	5001 5000		14 C 70A	7.4	3090		0.03	0.18 0.89	0.48	0.92	0.08	0.19
3/04/71 0755	5001 5000		9 C 70A	6.8	2740	82 0	0.32	0.30 0.18	0.15	0.5	0.07	0.15
4/06/71 1030	5001 5000		15 C 80A	7.5	145	62 0	0.02	0.0 0.25	0.08	0.27	0.02	0.18
5/04/71 1015	5001 5000		14 C 75A	7.3	758	63 0	0.0	0.04 0.31	0.18	0.31	0.05	0.20
6/02/71 1020	5001 5000		17 C 40A	7.9	372	63 0	0.0	0.03 0.24	0.27	0.24	0.05	0.16
6/30/71 0835	5001 5000		20 C 60A	7.7	1550	64 0	0.01	0.04			0.01	0.11
8/03/71 1300	5001 5001		21 C 60A	7.8	7560	64 0	0.01	0.03	0.03		0.04	0.17
8/31/71 1200	5001 5001		21 C 47A	8.0	2510	81 0	0.01	0.06			0.05	0.20
9/28/71 0950	5001 5001		18 C 34A	7.5	338	72 0	0.0	0.08			0.04	0.10
E0 S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS												
11/06/70 0920	5001 5000		14 C 90A	7.1	5100	102 0	0.43	0.20 0.73		1.16	0.04	0.06
5/17/71 1115	5001 5000		18 C 100A	7.4	1450	100 0	0.09	0.17 0.50		0.59	0.02	0.38
8/27/71 0900	5001 5001		21 C 50A	7.7	4240	84 0	0.05	0.10			0.03	0.16
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND												
11/06/70 1215	5001 5000		15 C 75A	7.3	3670	141 0	0.28	0.50 0.92		1.2	0.10	0.14
5/17/71 1405	5001 5000		19 C 75A	7.9	1860	127 0	0.04	0.83 0.49		0.53	0.12	0.40
8/27/71 1240	5001 5001		23 C 50A	7.9	4390	102 0	0.07	0.10			0.04	0.21
E0 S 811.0 204.8 CHADBOURNE SLOUGH AT CHADBOURNE ROAD NEAR SUISUN												
11/06/70 1040	5001 5000		15 C 70A	7.2	4180	129 0	0.43	0.30 0.92		1.35	0.08	0.11
5/17/71 1250	5001 5000		19 C 80A	7.7	1400	165 0	0.08	0.61 0.77		0.85	0.03	0.32
8/27/71 1115	5001 5001		21 C 40A	7.7	4040	113 0	0.12	0.21			0.02	0.16
E0 S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD												
11/06/70 1300	5001 5000		15 C 65A	7.1	5920	103 0	0.32	0.20 1.20		1.52	0.02	0.06
5/17/71 1450	5001 5000		19 C 65A	7.8	683	73 0	0.07	0.08 0.36		0.43	0.02	0.20
8/27/71 1330	5001 5001		23 C 40A	7.9	3610	80 0	0.03	0.10			0.03	0.15
E0 S 811.5 207.2 CORDELIA SLOUGH AT UPPER END NEAR CORDELIA												
5/17/71 1205	5001 5000		19 C 75A	7.7	1190	200 0	0.14	0.33 0.42		0.56	0.04	0.29
8/27/71 1015	5001 5001		20 C 80A	8.0	606	176 0	0.03	0.15			0.07	0.20
E0 S 813.6 201.2 HILL SLOUGH AT GRIZZLY ISLAND ROAD												
11/06/70 1330	5001 5000		15 C 45A	7.6	530	172 0	0.0	0.10 0.50		0.5	0.27	0.27
8/27/71 1400	5001 5001		21 C 45A	8.0	3430	168 0	0.08	0.40			0.25	0.48
E3 1100.50 NAPA RIVER AT DUTTONS LANDING												
4/13/71 1130	5050 5050		60 F	8.2	4500		0.00	0.38 0.0		0.0	0.11	0.23
E3 2100.51 GREEN VALLEY CREEK AT CORDELIA												
11/06/70 1005	5001 5000		14 C 50A	7.7	296	133 0	0.0	0.30 0.76		0.76	0.05	0.07

TABLE D-5

PESTICIDES IN SURFACE WATER AND SEDIMENT

Pesticides

- BHC - Benzene hexachloride
- DDE - Dichloro diphenyl ethane
- DDT - Dichloro diphenyl trichlorethane
- PCB - Polychlorinated biphenol

When two pesticides are reported together with a slash mark separating them (ppDDE/Dieldrin, Simazine/Atrazine, etc.), the reported concentration is an undifferentiated total of the two. Either of the two pesticides could make up the entire total.

Lab and Sampler Agency Codes

- 5001 - U. S. Bureau of Reclamation
- 5007 - U. S. Environmental Protection Agency Laboratory at Alameda
- 5050 - Department of Water Resources

TABLE D-5 (Cont.)

## PESTICIDES IN SURFACE WATER AND SEDIMENT

Station Number	Station	Date Time	Pesticides in Water (nanograms per liter)	Pesticides in Sediment (micrograms per liter of dry weight)	Samp	Lab
D1 1006.30	WATSONVILLE SLOUGH AT SAN ANDRES ROAD	05-05-71 1000	Malathion 290 Simazine/Atrazine 100 PCB 560 Unknown as Parathion 15		5050	5050
D1 1075.30	PAJARO RIVER AT THURWACHTER ROAD	05-05-71 1030	Simazine/Atrazine 95 Unknown #1 as DDT 5 Unknown #2 as DDT 5 Diazinon 25		5050	5050
D1 1250.00	PAJARO RIVER AT CHITTENDEN	02-17-71 1100	Unknown as DDT 5 No organic phosphorus pesticide detected		5050	5050
		05-05-71 1130	Simazine/Atrazine 60 Unknown as DDT 35 No organic phosphorus pesticide detected		5050	5050
D1 1371.50	UVAS CREEK NEAR MORGAN HILL BELOW UVAS DAM	05-05-71 1400	No chlorinated pesticide detected No organic phosphorus pesticide detected		5050	5050
D1 1475.50	PLANEL AGRICULTURAL DRAIN ABOVE LLAGAS CREEK	05-05-71 1245	Simazine/Atrazine 45 Complex chlorinated compounds as DDT 50 No organic phosphorus pesticide detected		5050	5050
D1 2450.00	SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL	05-05-71 0900	Unknown as DDT 2 No organic phosphorus pesticide detected		5050	5050
D1 3220.20	ELKHORN SLOUGH AT BRIDGE NEAR HALL	05-05-71 0915	Simazine/Atrazine 115 Complex chlorinated compounds as DDT 55 No organic phosphorus pesticide detected		5050	5050
D2 1006.30	TEMBLADERO SLOUGH AT NASHUA ROAD	05-05-71 1450	Unknown #1 as DDT 740 Unknown #2 as DDT 240 Complex chlorinated compounds as DDT 4600 Thimet 880 Diazinon 350 Parathion 900		5050	5050
D2 1006.60	TEMBLADERO SLOUGH AT MERRITT LAKE DRAIN	05-05-71 1300	Simazine/Atrazine 450 Diazinon 20 Methyl Parathion 85 Parathion 25		5050	5050
D2 1009.20	SALINAS RECLAMATION CANAL BELOW ALISAL SLOUGH	02-17-71 1015	Simazine/Atrazine 1180 Unknown #1 as DDT 620 Unknown #2 as DDT 290 Diazinon 250 Methyl Parathion 160		5050	5050
		05-05-71 1230	Unknown #1 as DDT 880 Unknown #2 as DDT 340 Complex chlorinated compound as DDT 6900 Thimet 660 Diazinon 210 Methyl Parathion 130 Parathion 860		5050	5050
D2 1020.70	SALINAS RECLAMATION CANAL AT AIRPORT WAY	05-05-71 1030	Unknown #1 as DDT 610 Unknown #2 as DDT 5300 Unknown #3 as DDT 2200 Unknown #4 as DDT 2000 Unknown #5 as DDT 3100 Unknown #6 as DDT 2600 DDT 3100 Thimet 710 Diazinon 700 Methyl Parathion 1300 Parathion 3600		5050	5050
D2 1030.30	BLANCO DRAIN AT PUMP LIFT	02-17-71 1005	Simazine/Atrazine 190 Unknown #1 as DDT 30 Unknown #2 as DDT 95 Unknown #3 as DDT 60 Complex chlorinated compounds as DDT 425 Methyl parathion 120 Parathion 600		5050	5050
		05-05-71 1200	Unknown #1 as DDT 2100 Unknown #2 as DDT 1200 Unknown #3 as DDT 200 Parathion 2810		5050	5050



TABLE D-5 (Cont.)

## PESTICIDES IN SURFACE WATER AND SEDIMENT

Station Number	Station	Date Time	Pesticides in Water (nanograms per liter)	Pesticides in Sediment (micrograms per liter of dry weight)	Samp	Lob
D2 1110.50	SALINAS RIVER AT TWIN BRIDGES	05-05-71 0800	Unknown #1 as DDT 30 Unknown #2 as DDT 145 Unknown #3 as DDT 30 Phorate (Thimet) 45 Parathion 75		5050	5050
D2 1325.10	SALINAS RIVER NEAR GONZALES	02-17-71 0840	Unknown as DDT 5 No organic phosphorus pesticides detected		5050	5050
		05-05-71 1230	Unknown #1 as DDT 4 Unknown #2 as DDT 3 No organic phosphorus pesticides detected		5050	5050
D2 1450.00	ARROYO SECO NEAR SOLEDAD	05-05-71 1140	No chlorinated pesticides detected No organic phosphorus pesticides detected		5050	5050
D2 1850.00	SALINAS RIVER AT BRADLEY	05-05-71 1000	No chlorinated pesticides detected No organic phosphorus pesticides detected		5050	5050
D4 1010.50	CARMEL RIVER AT HIGHWAY 1	05-05-71 1430	No chlorinated pesticides detected No organic phosphorus pesticides detected		5050	5050
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	03-16-71 1020	Unknown as DDT 55		5050	5050
		07-08-71 0820	Unknown as DDT 5		5050	5050
		09-21-71 0915	Unknown as DDT 9 Complex chlorinated compounds as DDT 10		5050	5050
EO B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE	11-17-70 0950	Complex chlorinated compounds as DDT 20		5050	5050
		01-28-71 075C	No chlorinated pesticides detected		5050	5050
		05-11-71 0810	Simazine/Atrazine 18 Unknown as DDT 10		5050	5050
EO B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	07-08-71 0915	Unknown as DDT 5		5050	5050
		09-21-71 1050	Unknown as DDT 15 Complex chlorinated compounds as DDT 10		5050	5050
EO B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND	11-17-70 1100	No chlorinated pesticides detected		5050	5050
		01-28-71 0730	No chlorinated pesticides detected		5050	5050
		03-16-71 1005	Unknown as DDT 2		5050	5050
		05-11-71 0812	No chlorinated pesticides detected		5050	5050
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	07-08-71 0640	Unknown as DDT 5		5050	5050
		09-21-71 0715	Unknown as DDT 15 Complex chlorinated compounds as DDT 15		5050	5050
EO B 757.7 226.2	SAN PABLO STRAIT WEST OF THE BROTHERS	11-17-70 1145	No chlorinated pesticides detected		5050	5050
		01-28-71 1000	Unknown as DDT 5		5050	5050
		03-16-71 1050	Unknown as DDT 3		5050	5050
		05-11-71 1000	No chlorinated pesticides detected		5050	5050
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ	10-07-70 1045	Aldrin <3 BHC 3 DDE <3 DDT <10 Dieldrin <3 Toxaphene <100 Heptachlor <3 Heptachlor Epoxide <3		5001	5007

TABLE D-5 (Cont.)

## PESTICIDES IN SURFACE WATER AND SEDIMENT

Station Number	Station	Date Time	Pesticides in Water (nanograms per liter)	Pesticides in Sediment (micrograms per liter of dry weight)	Samp	Lab
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ (Continued)	11-20-70 1035	Aldrin	↻	5001	5007
			BHC	↻		
			DDE	↻		
			DDT	<10		
			Dieldrin	↻		
			Toxaphene	<100		
			Heptachlor	↻		
			Heptachlor Epoxide	↻		
		05-04-71 1105	Aldrin	↻		
			BHC	↻		
			DDE	↻		
			DDT	<10		
			Dieldrin	↻		
			Toxaphene	<100		
			Heptachlor	↻		
			Heptachlor Epoxide	↻		
		06-02-71 1105	Aldrin	↻		
			BHC	↻		
			DDE	↻		
			DDT	<10		
Dieldrin	↻					
Toxaphene	<100					
Heptachlor	↻					
Heptachlor Epoxide	↻					
07-15-71 1115	Aldrin	↻				
	BHC	↻				
	DDE	↻				
	DDT	<10				
	Dieldrin	↻				
	Toxaphene	<100				
	Heptachlor	↻				
	Heptachlor Epoxide	↻				
08-31-71 1245	Aldrin	↻				
	BHC	↻				
	DDE	↻				
	DDT	<10				
	Dieldrin	↻				
	Toxaphene	<100				
	Heptachlor	↻				
	Heptachlor Epoxide	↻				
EO B 804.4 156.2	HONKER BAY NEAR WHEELER POINT	06-02-71 1210	Aldrin	↻	5001	5007
			BHC	↻		
			DDE	↻		
			DDT	<10		
			Dieldrin	↻		
			Toxaphene	<100		
			Heptachlor	↻		
			Heptachlor Epoxide	↻		





TABLE D-7 (Cont.)

## DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

DO 1180.01 SAN LORENZO RIVER AT PARADISE PARK  
(October 1970 through September 1971)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	325	300	325	345	330	335	240	205	220	285	280	285	345	340	342	345	340	345
2	325	325	325	330	330	330	214	160	185	290	285	287	345	345	345	350	345	345
3	330	320	325	335	310	330	255	215	240	290	285	285	345	340	342	350	345	348
4	325	315	320	315	250	285	255	155	188	290	285	285	340	340	340	355	345	350
5	325	320	325	345	295	330	255	200	235	285	280	282	345	340	342	355	345	350
6	330	325	327	345	225	300	275	255	265	285	280	282	345	345	345	350	345	348
7	330	325	328	345	275	320	290	275	285	285	283	284	345	345	345	355	345	350
8	330	325	329	385	345	370	290	250	275	288	285	287	345	340	342	355	350	355
9	325	320	325	385	375	380	285	275	280	290	285	290	340	340	340	360	350	355
10	325	320	322	390	375	385	295	285	290	290	290	290	345	340	342	360	350	355
11	325	320	320	NR	NR	NR	305	295	300	295	285	280	345	345	345	360	350	355
12	325	320	322	NR	NR	NR	305	305	305	NR	NR	NR	345	345	345	355	230	305
13	325	320	320	NR	NR	NR	315	310	312	NR	NR	NR	350	345	345	NR	NR	NR
14	325	320	320	NR	NR	NR	318	312	315	NR	NR	NR	350	340	345	NR	NR	NR
15	325	320	325	NR	NR	NR	320	310	315	NR	NR	NR	350	345	348	NR	NR	NR
16	325	320	323	NR	NR	NR	310	230	250	NR	NR	NR	350	340	345	320	300	310
17	325	315	320	NR	NR	NR	250	230	240	NR	NR	NR	345	340	343	NR	NR	NR
18	325	315	320	NR	NR	NR	250	165	200	NR	NR	NR	345	340	345	NR	NR	NR
19	325	320	322	NR	NR	NR	195	165	180	NR	NR	NR	340	315	335	NR	NR	NR
20	325	305	315	355	315	345	230	145	200	NR	NR	NR	340	335	338	330	330	330
21	335	310	330	340	340	340	190	125	160	NR	NR	NR	340	335	335	335	330	333
22	340	315	325	345	335	340	215	190	205	NR	NR	NR	345	335	340	340	335	335
23	360	330	340	345	315	335	200	185	190	NR	NR	NR	350	345	347	340	335	338
24	360	345	350	350	320	340	235	185	205	NR	NR	NR	350	345	350	345	340	340
25	345	340	340	330	285	315	245	235	240	NR	NR	NR	355	350	350	345	320	335
26	340	330	338	340	230	305	260	230	240	335	335	335	350	350	350	325	250	280
27	335	330	335	345	305	335	265	240	257	340	335	337	350	335	342	290	255	275
28	335	330	333	320	195	220	275	260	270	340	335	340	350	345	345	320	290	310
29	335	325	332	225	190	205	275	240	257	340	335	340	350	345	340	325	315	320
30	330	325	329	250	230	240	270	250	260	340	340	340	350	345	340	325	320	320
31	335	325	330				280	270	275	340	340	340				325	320	325

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	325	320	320	385	380	385	360	355	355	360	355	360	350	345	347	350	340	345
2	320	320	320	380	365	375	360	355	355	365	360	362	355	345	348	350	340	345
3	325	320	322	370	365	370	360	355	360	365	355	360	355	350	352	350	345	348
4	325	320	325	370	365	365	360	360	360	360	350	355	355	345	350	355	345	350
5	325	325	325	370	365	370	365	360	360	355	350	353	350	340	345	355	345	348
6	330	320	325	370	365	370	360	355	358	355	350	352	350	340	345	355	345	350
7	325	320	323	375	365	370	360	355	358	355	350	355	350	340	345	350	340	345
8	330	325	327	365	360	365	365	360	362	355	350	355	350	345	347	NR	NR	NR
9	330	325	328	360	345	355	365	360	362	355	350	355	350	345	347	NR	NR	NR
10	325	315	320	345	340	345	365	360	360	355	345	355	350	345	347	NR	NR	NR
11	325	315	320	360	345	355	370	360	365	355	345	350	355	340	350	NR	NR	NR
12	330	325	325	365	355	360	365	360	365	355	350	352	350	340	345	NR	NR	NR
13	330	285	325	NR	NR	NR	370	360	365	360	350	355	350	340	345	NR	NR	NR
14	295	225	280	NR	NR	NR	370	360	365	360	350	355	350	340	345	360	328	350
15	315	295	310	NR	NR	NR	365	360	365	355	350	355	350	340	345	360	352	355
16	315	310	313	NR	NR	NR	370	360	365	360	350	355	350	340	345	359	345	353
17	315	305	310	NR	NR	NR	370	360	365	360	350	357	350	340	345	358	348	353
18	315	305	310	NR	NR	NR	370	360	365	360	355	358	350	340	345	355	345	352
19	315	315	315	355	345	350	370	360	365	360	350	355	350	345	348	350	345	348
20	315	315	315	350	350	350	365	355	360	355	350	352	350	345	348	349	341	345
21	315	315	315	350	350	350	360	350	355	355	350	353	350	345	348	345	345	345
22	315	315	315	350	350	350	360	350	355	355	345	350	350	345	347	345	345	345
23	320	315	318	355	350	352	360	355	358	355	345	350	350	340	345	350	345	348
24	320	315	318	355	350	353	365	355	360	355	345	350	350	340	343	350	345	350
25	320	315	320	355	340	345	365	360	365	355	345	350	350	340	345	355	340	345
26	320	320	320	355	350	350	365	355	362	350	345	348	350	340	345	355	335	345
27	360	320	340	355	355	355	360	355	358	350	345	348	350	345	347	345	340	340
28	370	360	365	360	355	358	360	355	358	355	345	350	350	345	348	345	340	343
29	385	370	380	360	355	358	360	355	360	355	345	350	350	345	347	340	330	337
30	385	370	375	360	355	358	360	355	358	355	345	350	350	340	345	350	330	340
31				360	355	357				355	345	348	350	340	345			

NR - No record

TABLE D-7 (Cont.)

## DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

D1 1250.00 PAJARO RIVER NEAR CHITTENDEN  
(October 1970 through September 1971)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10		N			N			N			N			N			N	
11		O			O			O			O			O			O	
12																		
13																		
14																		
15		R			R			R			R			R			R	
16		E			E			E			E			E			E	
17																		
18		C			C			C			C			C			C	
19																		
20		O			O			O			O			O			O	
21		R			R			R			R			R			R	
22																		
23		D			D			D			D			D			D	
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1										NR	NR	NR	2,220	2,060	2,127	1,590	1,570	1,578
2										NR	NR	NR	2,340	1,280	1,927	1,610	1,590	1,598
3										NR	NR	NR	2,130	1,800	1,966	1,610	1,580	1,595
4										NR	NR	NR	1,850	1,500	1,712	1,600	1,580	1,585
5										NR	NR	NR	1,700	1,580	1,632	1,590	1,580	1,589
6										NR	NR	NR	1,820	1,700	1,757	1,610	1,590	1,602
7										NR	NR	NR	1,850	1,750	1,812	1,610	1,600	1,607
8										NR	NR	NR	1,800	1,720	1,772	1,590	1,580	1,581
9										NR	NR	NR	1,710	1,570	1,647	1,590	1,580	1,582
10		N			N			N		NR	NR	NR	1,610	1,540	1,572	1,580	1,550	1,561
11		O			O			O		NR	NR	NR	1,590	1,520	1,553	1,550	1,540	1,545
12										NR	NR	NR	1,520	1,500	1,508	1,590	1,520	1,530
13										NR	NR	NR	1,520	1,500	1,510	1,530	1,530	1,530
14										NR	NR	NR	1,530	1,480	1,500	1,550	1,520	1,529
15		R			R			R		NR	NR	NR	1,480	1,450	1,466	1,590	1,540	1,555
16		E			E			E		NR	NR	NR	1,450	1,420	1,431	1,630	1,510	1,562
17										NR	NR	NR	1,450	1,420	1,427	1,660	1,580	1,644
18		C			C			C		NR	NR	NR	1,440	1,390	1,407	1,660	1,640	1,643
19										NR	NR	NR	1,460	1,440	1,444	1,750	1,700	1,717
20		O			O			O		NR	NR	NR	1,450	1,440	1,443	1,770	1,740	1,757
21		R			R			R		NR	NR	NR	1,450	1,440	1,445	1,750	1,720	1,742
22										1,575	1,460	1,511	1,490	1,450	1,462	1,760	1,730	1,734
23										1,530	1,450	1,501	1,570	1,500	1,525	1,830	1,800	1,807
24		D			D			D		1,650	1,540	1,590	1,620	1,580	1,592	1,850	1,840	1,841
25										1,680	1,600	1,643	1,590	1,560	1,576	1,880	1,850	1,869
26										1,620	1,600	1,606	1,650	1,580	1,605	1,880	1,880	1,880
27										1,650	1,610	1,633	1,670	1,650	1,660	1,920	1,880	1,892
28										1,630	1,590	1,610	1,660	1,640	1,649	1,870	1,820	1,843
29										1,650	1,620	1,631	1,640	1,620	1,627	1,800	1,760	1,786
30										1,710	1,650	1,683	1,620	1,600	1,610	1,730	1,720	1,727
31										2,030	1,710	1,771	1,610	1,600	1,602			

NR - No record.







TABLE D-7 (Cont.)

DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

D2 1325.10 SALINAS RIVER NEAR GONZALES  
(October 1970 through September 1971)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	NR	NR	NR	NR	NR	NR	660	310	485	370	370	370	990	950	970			
2	360	300	330	NR	NR	NR	630	170	400	NR	NR	NR	1,070	942	1,006			
3	245	225	235	NR	NR	NR	480	200	340	NR	NR	NR	972	932	952			
4	325	275	300	400	320	360	525	435	480	NR	NR	NR	962	912	927			
5	225	200	212	380	315	348	520	460	490	NR	NR	NR	932	922	927			
6	325	235	280	370	330	350	660	500	580	NR	NR	NR	932	912	922			
7	350	270	310	345	340	342	770	660	715	NR	NR	NR	932	872	902			
8	320	250	285	345	345	345	745	695	720	NR	NR	NR	897	887	892			
9	340	235	287	345	335	340	690	500	595	NR	NR	NR	1,030	990	1,010			
10	NR	NR	NR	345	335	340	700	490	595	NR	NR	NR	1,020	990	1,005			N
11	NR	NR	NR	350	340	345	700	680	690	NR	NR	NR	1,020	990	1,005			O
12	NR	NR	NR	NR	NR	NR	700	670	685	924	890	907	1,030	990	1,010			
13	425	265	345	NR	NR	NR	700	680	690	890	470	680	1,040	1,000	1,020			
14	460	270	365	NR	NR	NR	720	680	700	850	380	615	1,030	1,010	1,020			
15	460	310	385	NR	NR	NR	740	710	725	700	400	550	1,040	1,010	1,025			R
16	460	275	367	NR	NR	NR	740	720	730	670	600	635	1,280	880	1,080			E
17	475	380	427	NR	NR	NR	745	715	730	640	600	620	1,638	1,098	1,368			
18	475	455	465	NR	NR	NR	725	695	710	675	645	660	1,588	1,148	1,368			C
19	470	450	460	NR	NR	NR	700	660	680	810	780	795	1,668	1,128	1,398			
20	465	375	420	NR	NR	NR	940	620	780	850	790	820	1,618	1,148	1,383			O
21	485	475	480	NR	NR	NR	920	260	590	880	817	848	1,388	1,128	1,258			R
22	490	480	485	NR	NR	NR	360	260	320	890	830	860	1,398	1,180	1,258			
23	490	460	475	NR	NR	NR	410	300	355	910	870	890	1,198	1,068	1,133			D
24	495	485	490	NR	NR	NR	315	285	300	1,060	1,030	1,045	1,367	1,207	1,287			
25	515	495	505	NR	NR	NR	360	310	335	1,080	1,070	1,075	1,747	1,257	1,502			
26	510	470	490	NR	NR	NR	380	260	320	1,070	930	1,000	1,817	1,397	1,607			
27	NR	NR	NR	NR	NR	NR	340	310	325	950	810	880	1,587	1,327	1,457			
28	NR	NR	NR	NR	NR	NR	445	295	370	860	830	845	NR	NR	NR			
29	NR	NR	NR	390	145	278	530	370	450	1,130	950	1,040						
30	NR	NR	NR	310	155	237	440	380	410	950	890	920						
31	NR	NR	NR				385	365	375	950	910	930						

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	NR	NR	NR	NR	NR	NR	440	420	430	230	210	220	NR	NR	NR	NR	NR	NR
2	NR	NR	NR	NR	NR	NR	440	430	435	220	200	210	NR	NR	NR	NR	NR	NR
3	NR	NR	NR	NR	NR	NR	540	430	485	220	200	210	200	140	170	NR	NR	NR
4	NR	NR	NR	NR	NR	NR	550	430	490	240	200	220	300	140	220	NR	NR	NR
5	NR	NR	NR	NR	NR	NR	440	430	435	240	210	225	350	260	305	NR	NR	NR
6																		
7	1,060	680	870	NR	NR	NR	450	440	445	230	230	230	350	280	315	NR	NR	NR
8	1,090	1,050	1,070	NR	NR	NR	450	430	440	230	220	225	380	300	340	NR	NR	NR
9	1,090	1,030	1,060	NR	NR	NR	450	280	365	NR	NR	NR	330	300	315	NR	NR	NR
10	1,070	670	870	NR	NR	NR	320	290	305	NR	NR	NR	360	260	310	NR	NR	NR
11	NR	NR	NR	NR	NR	NR	350	260	305	NR	NR	NR	350	250	300	NR	NR	NR
12	NR	NR	NR	690	550	620	360	260	310	NR	NR	NR	300	250	275	NR	NR	NR
13	NR	NR	NR	570	550	560	340	260	300	NR	NR	NR	290	250	270	NR	NR	NR
14	NR	NR	NR	580	560	570	300	240	270	360	320	340	310	270	290	NR	NR	NR
15	NR	NR	NR	720	520	620	310	250	280	400	350	375	350	310	330	340	340	340
16	NR	NR	NR	590	520	555	320	250	285	400	360	380	350	350	350	360	310	335
17	NR	NR	NR	580	550	565	320	250	285	370	340	355	350	330	340	310	200	255
18	NR	NR	NR	560	540	550	310	260	285	350	330	340	350	290	320	230	200	215
19	NR	NR	NR	570	530	550	300	250	275	350	260	305	350	280	315	260	210	235
20	NR	NR	NR	560	500	530	300	240	270	310	260	285	350	330	340	220	200	210
21	NR	NR	NR	560	510	535	270	260	265	290	140	215	390	330	360	210	200	205
22	NR	NR	NR	570	510	540	270	250	260	NR	NR	NR	390	390	390	240	210	225
23	NR	NR	NR	520	480	500	270	240	255	NR	NR	NR	390	370	380	240	200	220
24	NR	NR	NR	500	480	490	260	240	250	NR	NR	NR	370	310	340	220	200	210
25	NR	NR	NR	480	450	465	260	240	250	NR	NR	NR	NR	NR	NR	240	200	220
26	NR	NR	NR	460	440	450	260	230	245	NR	NR	NR	NR	NR	NR	250	200	225
27	NR	NR	NR	450	430	440	250	230	240	NR	NR	NR	NR	NR	NR	250	250	250
28	NR	NR	NR	440	420	430	240	210	225	NR	NR	NR	NR	NR	NR	250	250	250
29	NR	NR	NR	430	420	425	230	210	220	NR	NR	NR	NR	NR	NR	250	250	250
30	NR	NR	NR	430	420	425	240	200	220	NR	NR	NR	NR	NR	NR	250	250	250
31	NR	NR	NR	430	410	420	240	210	225	NR	NR	NR	NR	NR	NR	360	200	280

NR - No record.

TABLE D-7 (Cont.)

## DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

F9 1100.00 RUSSIAN RIVER NEAR GUERNEVILLE  
(October 1970 through September 1971)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	304	298	301	334	324	329	212	197	206	310	245	270	NR	NR	NR	305	302	303
2	300	293	296	339	325	334	226	210	218	310	218	240	NR	NR	NR	311	310	310
3	297	291	294	340	326	335	239	226	234	251	230	244	NR	NR	NR	312	311	312
4	360	292	325	350	278	325	238	59	140	251	233	245	NR	NR	NR	312	311	312
5	310	290	298	278	251	264	137	62	105	242	227	237	NR	NR	NR	311	311	311
6	294	289	291	264	201	230	160	137	150	230	226	229	NR	NR	NR	311	311	311
7	296	291	294	260	200	230	172	160	166	230	226	229	NR	NR	NR	311	310	310
8	300	294	296	300	260	285	180	167	173	228	228	228	NR	NR	NR	312	311	311
9	358	300	326	317	300	310	188	159	171	228	226	227	NR	NR	NR	311	311	311
10	345	333	340	318	308	313	185	175	180	230	217	224	NR	NR	NR	311	311	311
11	398	301	340	308	299	304	191	185	188	225	214	220	NR	NR	NR	312	311	311
12	301	277	287	306	286	296	199	190	194	NR	NR	NR	NR	NR	NR	311	140	230
13	283	279	281	294	288	292	201	199	200	NR	NR	NR	NR	NR	NR	168	130	145
14	288	282	285	300	294	297	203	200	202	206	199	203	NR	NR	NR	188	168	180
15	311	288	300	300	298	299	233	174	213	201	195	197	NR	NR	NR	187	175	181
16	312	310	311	314	300	307	183	141	162	198	89	150	NR	NR	NR	197	187	192
17	318	310	312	322	314	317	165	141	153	170	142	160	NR	NR	NR	203	193	198
18	319	316	318	322	315	318	165	128	146	179	170	174	NR	NR	NR	NR	NR	NR
19	320	312	315	325	322	324	182	152	170	192	179	186	310	310	310	NR	NR	NR
20	320	318	319	328	325	326	190	138	165	207	192	199	311	310	310	NR	NR	NR
21	354	316	337	330	328	329	152	124	143	212	207	209	311	311	311	NR	NR	NR
22	342	301	318	330	330	330	170	152	165	214	212	213	312	295	310	NR	NR	NR
23	346	292	310	330	330	330	198	170	180	217	214	216	298	175	200	NR	NR	NR
24	341	300	325	330	328	330	212	198	205	217	213	215	211	175	186	NR	NR	NR
25	333	297	315	375	314	345	224	212	218	218	213	216	260	211	236	NR	NR	NR
26	333	330	331	320	250	282	230	224	227	220	218	220	286	260	273	187	100	130
27	337	331	334	256	170	242	240	230	235	221	218	220	299	285	292	160	110	135
28	338	333	336	175	102	130	242	174	230	NR	NR	NR	302	299	301	175	160	167
29	337	332	335	168	157	162	174	128	142	NR	NR	NR	NR	NR	NR	189	175	182
30	338	332	335	197	167	182	230	130	190	NR	NR	NR	NR	NR	NR	291	189	195
31	336	334	335				245	225	235	NR	NR	NR	NR	NR	NR	215	210	208

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	221	215	218	239	239	239	278	272	275	302	293	299	261	258	260	257	249	252
2	229	221	225	240	239	239	279	276	277	308	291	301	268	260	264	259	252	256
3	232	229	230	240	238	239	279	275	277	308	298	303	267	259	263	255	253	254
4	232	230	232	252	238	245	278	271	275	310	295	304	260	253	258	256	250	254
5	238	232	235	275	252	264	272	268	270	307	297	302	259	249	255	258	253	256
6	240	238	239	290	275	283	270	268	270	309	297	303	255	250	253	260	253	257
7	240	239	240	296	290	293	270	269	270	303	291	298	255	250	252	257	251	254
8	242	240	240	299	293	297	270	268	269	301	282	293	252	246	249	255	249	252
9	242	239	242	298	288	293	270	269	270	293	277	285	256	250	254	253	248	251
10	240	231	237	288	262	275	270	270	270	298	285	289	255	248	252	260	251	257
11	233	227	230	264	260	262	271	267	270	298	281	290	252	248	250	262	248	255
12	241	233	237	267	261	264	267	261	262	293	282	289	251	248	250	250	243	247
13	243	241	242	270	265	267	274	267	273	292	274	283	250	249	250	250	246	249
14	246	228	238	270	264	268	273	271	272	283	270	279	250	248	249	257	243	249
15	250	239	245	271	269	270	272	270	270	280	270	276	251	247	250	255	246	249
16	257	250	254	270	250	260	272	270	271	280	261	273	256	250	253	260	252	256
17	257	250	254	261	250	256	274	268	271	270	258	264	251	243	248	262	257	260
18	250	245	246	261	259	260	270	270	270	262	254	259	250	242	247	262	254	258
19	248	246	247	262	260	261	271	268	269	266	258	262	250	246	248	264	258	261
20	248	247	247	263	261	262	271	267	269	266	254	260	259	250	256	266	254	262
21	250	248	249	271	261	266	270	268	270	260	250	256	259	252	256	260	250	255
22	252	250	250	272	270	271	270	261	266	260	250	255	260	253	257	267	260	264
23	251	250	250	274	270	272	269	262	265	260	250	255	261	257	259	263	260	261
24	250	250	250	277	271	274	278	269	273	260	252	256	258	250	253	266	260	263
25	250	250	250	277	271	274	283	275	279	255	251	253	251	248	249	270	265	267
26	250	250	250	283	271	278	287	279	283	262	255	260	250	243	247	272	263	268
27	250	250	250	308	274	298	291	283	287	261	255	259	248	243	246	283	270	276
28	250	247	249	279	271	275	307	285	292	260	253	257	252	247	250	283	272	276
29	247	240	243	274	270	272	329	293	308	261	253	258	252	250	251	272	268	270
30	240	239	240	271	270	270	308	290	299	261	251	257	253	250	252	337	268	290
31				273	270	271				260	254	256	251	248	250			

TABLE D-8

## PHYTOPLANKTON ANALYSIS OF SURFACE WATER

Station Number	Station	Date Time	Phytoplankton (number per milliliter)					Most Abundant Phytoplankton (genus %)						Samp	Lab		
			Total	B1-Gr	Green	Flag	Diatoms C P	1	2	3	4	5	6				
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	02-17-71 1330	348				220	$\frac{64}{64}$	$\frac{F 99}{63.2}$	$\frac{D 03}{18.4}$	$\frac{D 66}{18.4}$					5050	5050
		03-16-71 1020	582				420	$\frac{130}{32}$	$\frac{F 99}{72.2}$	$\frac{D 03}{22.3}$	$\frac{D 66}{5.5}$					5050	5050
		04-13-71 0920	2432				926	$\frac{1284}{222}$	$\frac{F 99}{34.1}$	$\frac{D 02}{26.3}$	$\frac{D 03}{17.3}$	$\frac{D 66}{7.8}$	$\frac{D 08}{6.6}$	$\frac{F 54}{4.0}$		5050	5050
		06-23-71 0810	1596				1500	$\frac{96}{0}$	$\frac{F 99}{94.0}$	$\frac{D 03}{6.0}$						5050	5050
		07-08-71 0820	2944				2400	$\frac{544}{0}$	$\frac{F 99}{81.5}$	$\frac{D 09}{16.3}$	$\frac{D 08}{2.2}$					5050	5050
		08-10-71 1030	644				580	$\frac{32}{32}$	$\frac{F 99}{90.0}$	$\frac{D 03}{5.0}$	$\frac{D 66}{5.0}$					5050	5050
		09-21-71 0915	452				420	$\frac{32}{0}$	$\frac{F 99}{92.9}$	$\frac{D 02}{7.1}$						5050	5050
EO B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE	10-21-70 1000	900				740	$\frac{160}{0}$	$\frac{F 99}{82.2}$	$\frac{D 03}{17.8}$					5050	5050	
		11-17-70 0950	352				320	$\frac{32}{0}$	$\frac{F 99}{90.9}$	$\frac{D 03}{9.1}$					5050	5050	
		12-16-70 0815	574				510	$\frac{64}{0}$	$\frac{F 99}{88.9}$	$\frac{D 03}{11.1}$					5050	5050	
		01-28-71 0750	352				190	$\frac{130}{32}$	$\frac{F 99}{54.0}$	$\frac{D 03}{36.9}$	$\frac{D 66}{9.1}$				5050	5050	
		05-11-71 0810	1152				610	$\frac{320}{222}$	$\frac{F 99}{52.9}$	$\frac{D 03}{27.8}$	$\frac{D 66}{16.4}$	$\frac{D 65}{2.8}$			5050	5050	
EO B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	06-23-71 0845	3492				3300	$\frac{32}{160}$	$\frac{F 99}{94.5}$	$\frac{D 66}{2.8}$	$\frac{D 65}{1.8}$	$\frac{D 03}{0.9}$		5050	5050		
		07-08-71 0915	1792				1600	$\frac{32}{160}$	$\frac{F 99}{89.3}$	$\frac{D 66}{8.9}$	$\frac{D 09}{1.8}$			5050	5050		
		08-10-71 1115	1244				1180	$\frac{0}{64}$	$\frac{F 99}{94.9}$	$\frac{D 65}{5.1}$				5050	5050		
		09-21-71 1050	17700				1700	$\frac{16000}{0}$	$\frac{D 03}{90.4}$	$\frac{F 99}{9.6}$				5050	5050		
EO B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND	10-21-70 1030	866				834	$\frac{0}{32}$	$\frac{F 99}{88.9}$	$\frac{F 03}{3.7}$	$\frac{F 54}{3.7}$	$\frac{D 66}{3.7}$		5050	5050		
		11-17-70 1100	480				480	$\frac{F 99}{100.0}$						5050	5050		
		12-16-70 1030	190				190	$\frac{F 99}{100.0}$						5050	5050		
		01-28-71 0730	608				480	$\frac{128}{0}$	$\frac{F 99}{78.9}$	$\frac{D 15}{10.5}$	$\frac{D 05}{5.3}$	$\frac{D 08}{5.3}$		5050	5050		
		02-17-71 1350				32	444	$\frac{260}{0}$	$\frac{F 99}{51.6}$	$\frac{D 03}{35.3}$	$\frac{F 56}{8.7}$	$\frac{G 22}{4.4}$	$\frac{D 09}{Trace}$		5050	5050	
		03-16-71 1005	478				220	$\frac{194}{64}$	$\frac{F 99}{46.0}$	$\frac{D 03}{27.2}$	$\frac{D 66}{13.4}$	$\frac{D 02}{6.7}$	$\frac{D 06}{6.7}$		5050	5050	
		04-13-71 0910	1090				580	$\frac{446}{64}$	$\frac{F 99}{53.2}$	$\frac{D 03}{17.4}$	$\frac{D 09}{14.7}$	$\frac{D 08}{5.9}$	$\frac{D 66}{5.9}$	$\frac{D 02}{2.9}$	5050	5050	
		05-11-71 0810	898				580	$\frac{222}{96}$	$\frac{F 99}{64.6}$	$\frac{D 03}{21.2}$	$\frac{D 66}{10.7}$	$\frac{D 02}{3.6}$		5050	5050		
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	06-23-71 0700	932				772	$\frac{160}{0}$	$\frac{F 99}{79.6}$	$\frac{D 03}{10.3}$	$\frac{F 54}{3.4}$	$\frac{D 02}{3.4}$	$\frac{D 09}{3.4}$	5050	5050		
		07-08-71 0640	1392				1296	$\frac{96}{0}$	$\frac{F 99}{86.2}$	$\frac{F 54}{6.9}$	$\frac{D 09}{4.6}$	$\frac{D 03}{2.3}$	$\frac{D 08}{Trace}$	5050	5050		
		08-10-71 0900	964				610	$\frac{160}{194}$	$\frac{F 99}{63.3}$	$\frac{D 70}{13.5}$	$\frac{D 03}{10.0}$	$\frac{D 09}{6.6}$	$\frac{D 66}{6.6}$	5050	5050		
		09-21-71 0715	894				320	$\frac{384}{190}$	$\frac{D 03}{35.8}$	$\frac{F 99}{35.8}$	$\frac{D 66}{21.2}$	$\frac{D 08}{7.2}$		5050	5050		

TABLE D-8 (Cont.)

## PHYTOPLANKTON ANALYSIS OF SURFACE WATER

Station Number	Station	Date Time	Phytoplankton (number per milliliter)					Most Abundant Phytoplankton (genus %)						Samp	Lab	
			Total	B1-Gr	Green	Flag	Diatoms C P	1	2	3	4	5	6			
EO B 757.7 226.2	SAN PABLO STRAIT WEST OF THE BROTHERS	10-21-70 1120	1022					<u>F 99</u> 96.9	<u>F 03</u> 3.1						5050	5050
		11-17-70 1145	738		32	610	<u>96</u> 0	<u>F 99</u> 82.7	<u>D 03</u> 13.0	<u>G 02</u> 4.3					5050	5050
		12-16-70 1220	418		64	290	<u>64</u> 0	<u>F 99</u> 69.4	<u>D 03</u> 15.3	<u>G 02</u> 15.3					5050	5050
		01-28-71 1000	288			160	<u>32</u> 96	<u>F 99</u> 55.6	<u>D 66</u> 22.2	<u>D 08</u> 11.1	<u>D 65</u> 11.1				5050	5050
		02-17-71 1430	674		32	546	<u>96</u> 0	<u>F 99</u> 66.7	<u>F 56</u> 14.2	<u>D 03</u> 9.5	<u>D 08</u> 4.8	<u>G 02</u> 4.8			5050	5050
		03-16-71 1050	638			350	<u>192</u> 96	<u>F 99</u> 54.9	<u>D 03</u> 25.1	<u>D 66</u> 15.0	<u>D 02</u> 5.0				5050	5050
		04-13-71 1010	2838			1100	<u>1610</u> 128	<u>F 99</u> 38.8	<u>D 03</u> 31.7	<u>D 08</u> 15.9	<u>D 09</u> 9.2	<u>D 66</u> 2.2	<u>D 70</u> 2.2		5050	5050
		05-11-71 1000	1024			800	<u>224</u> 0	<u>F 99</u> 78.2	<u>D 03</u> 15.6	<u>D 08</u> 6.3					5050	5050

Codes and Abbreviations

Total - Total phytoplankton count per milliliter  
 B1-Gr - Blue-Green Algae  
 Green - Green Algae  
 Flag - Flagellates  
 C/P - Centric over Pennate (undifferentiated if no dividing line is shown)

Lab and Sampler Agency Codes

5050 - Department of Water Resources

Most Abundant Phytoplankton Codes

Green Algae  
 G 02 Ankistrodemus  
 G 22 Selenastrum

Flagellates  
Green  
 F 03 Euglena

Other Pigmented  
 F 54 Dinoflagellates (Dinophyceae)  
 F 56 Cryptomonas  
 F 99 Unidentified

Diatoms  
Centric  
 D 02 Coscinodiscus  
 D 03 Cyclotella  
 D 05 Melosira (fresh water)  
 D 06 Stephanodiscus  
 D 08 Skeletonema  
 D 09 Chaetoceros  
 D 15 Thalassiosira

Pennate  
 D 65 Navicula  
 D 66 Nitzschia  
 D 70 Synedra

TABLE D-9  
SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS\*

(Chlorides in Milligrams per Liter)

Station Number	Station	OCTOBER 1970							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT		9,730 d			8,190	6,730	8,420	
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	6,210 a	7,080	6,960 df	7,430	6,710	4,220	6,190	6,310 a
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO		4,190 a	4,140 e	3,540	1,880 abd	2,540 a	2,270 abd	
EO B 803.0 159.0	SUISUN BAY AT NICHOLS			3,670 e	3,070	2,950	1,900 a	2,180	5,280
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG	200 bd	140 abd	190 a		229 bd		62 cd	62
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								
Station Number	Station	NOVEMBER 1970							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT	9,160	8,520 d		8,790	7,180	6,930	9,950	
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	7,430	6,190 a	5,250	6,560	4,010	3,520 ae	8,170	5,590
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO		3,030	2,670	2,960	1,290 bd	4,110	3,860	
EO B 803.0 159.0	SUISUN BAY AT NICHOLS	4,650	2,890	3,360	2,820	1,500	2,910	3,850	2,020
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG	176	166 abd	113 d	78		38	68	58
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								
Station Number	Station	DECEMBER 1970							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT								3,350
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	1,320 a	570			433	155 ae	1,070 a	1,780
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO	256	32 a	28	27	29		137	
EO B 803.0 159.0	SUISUN BAY AT NICHOLS		16	30	18	17	20		
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG		22	19	18	20 a		26	
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								

\*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

d Taken over one hour off schedule time.

b Taken on following day.

e Taken on preceding day.

c Taken two days later.

f Taken two days earlier.

TABLE D-9 (Cont.)

## SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS\*

(Chlorides in Milligrams per Liter)

Station Number	Station	JANUARY 1971							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT		4,630	6,120 d	3,050	4,050	3,000	2,150	3,320
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	976	4,440	4,330	1,760	3,030	178 a	1,070	49
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO		644	73 abd	49 d	41 a	68 a		25 a
EO B 803.0 159.0	SUISUN BAY AT NICHOLS								
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG	36							26 a
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								
Station Number	Station	FEBRUARY 1971							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT	4,180	5,170		5,330 d	4,240	7,710	5,920	
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	425 ad	2,750	1,440	3,740	2,190 cd	3,500 a	2,190 a	
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO	123	32 d	27 abd	5,554	1,280		372 bd	
EO B 803.0 159.0	SUISUN BAY AT NICHOLS						2,390	223	
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG		24		25	27		22	
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								
Station Number	Station	MARCH 1971							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT	6,560		9,150	7,440 d	5,960	7,340	9,230	
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	1,820 a	2,130	5,880	5,160		6,070 a	2,940	2,810
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO	169 a	1,260 abd	2,560	2,080	61 a	2,260		78
EO B 803.0 159.0	SUISUN BAY AT NICHOLS	982	1,790		1,460	274	1,870	1,050	51
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG								
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								

\*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

d Taken over one hour off schedule time.

b Taken on following day.

e Taken on preceding day.

c Taken two days later.

f Taken two days earlier.

TABLE D-9 (Cont.)

## SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS \*

(Chlorides in Milligrams per Liter)

Station Number	Station	APRIL 1971							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT	2,790		6,040	5,530 de	2,880	6,220	8,980	3,500
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	635 ae	2,430 a	1,080 a	3,280	30	3,910	4,490	3,080
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO	16	111 a	336	68 a	70	221 a		595 a
EO B 803.0 159.0	SUISUN BAY AT NICHOLS	11	15	15	396	14	43	1,660 d	371
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG			10 a				10 a	
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								
Station Number	Station	MAY 1971							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT		7,260	7,150	5,870	6,230 e	8,760	8,570	6,630
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	3,470 e	4,670 a	5,490	1,040 a	2,190 a	4,590	3,320	4,800
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO	377 e	2,730	280 d	897	638 e	2,850	2,600	1,150 bd
EO B 803.0 159.0	SUISUN BAY AT NICHOLS	251 e	2,670	1,680	518	20 e	325	1,960	172
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG		16 a						
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								
Station Number	Station	JUNE 1971							
		2	6	10	14	18	22	26	30
EO B 803.5 213.3	CARQUINEZ STRAIT AT CROCKETT	5,920 e	6,520	7,880	5,410		8,640		7,510
EO B 801.9 207.8	CARQUINEZ STRAIT AT MARTINEZ	2,410 a	2,390 a	5,380	1,540	6,460 df		6,070	2,540 a
EO B 803.4 202.3	SUISUN BAY AT PORT CHICAGO	4,350	1,910	376 a					
EO B 803.0 159.0	SUISUN BAY AT MIDDLE POINT	1,570 de	1,940	1,490	224	1,450	1,440	1,550	
B9 D 802.3 153.0	SACRAMENTO RIVER AT PITTSBURG								
B9 D 804.4 151.0	SACRAMENTO RIVER AT COLLINSVILLE								

\*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

d Taken over one hour off schedule time.

b Taken on following day.

e Taken on preceding day.

c Taken two days later.

f Taken two days earlier.





Appendix E: GROUND WATER QUALITY



## INTRODUCTION

This appendix presents ground water quality data collected during the period from October 1, 1970, through September 30, 1971. The data were collected from a number of major ground water sources in the Central Coastal Area in cooperation with other state, local, and federal agencies. During the 1971 water year, 189 wells were sampled in 23 ground water basins and subbasins or subareas.

At the time of field sampling, pH and temperature measurements are normally made. Comments on current conditions are noted in field books which are available in the files of the Department of Water Resources.

Laboratory analyses of ground waters were performed in accordance with "Standard Methods for the Examination of Water and Wastewater", 13th Edition.

The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurements", on page 15. The locations of the ground water basins and subbasins are shown on Figure C-1, pages 17, 18, and 19.

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TABLE E-1

MINERAL ANALYSES OF GROUND WATER

Lab and Sampler Agency Codes

- 2400 - Santa Clara Valley Water Conservation District
- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources
- 5100 - Alameda County Flood Control and Water Conservation District
- 5114 - Santa Clara County
- 5216 - City of Gilroy
- 5401 - Alameda County Water District
- 5818 - Cook Research Laboratory

Abbreviations

- Time - Pacific Standard Time on a 24-hour clock
- Temp. - Water temperature in degrees Fahrenheit at the time of field sampling
- pH - Measure of acidity or alkalinity of water
- EC - Electrical conductance in micromhos at 25° C
- TDS - Gravimetric determination of total dissolved solids at 180° C
- SUM - Total dissolved solids by summation of analyzed constituents
- TH - Total hardness
- NCH - Noncarbonate hardness - any excess of total hardness over total alkalinity

Mineral Constituents

- |                  |   |             |                  |   |           |
|------------------|---|-------------|------------------|---|-----------|
| B                | - | Boron       | K                | - | Potassium |
| Ca               | - | Calcium     | Mg               | - | Magnesium |
| Cl               | - | Chloride    | Na               | - | Sodium    |
| CO <sub>3</sub>  | - | Carbonate   | NO <sub>3</sub>  | - | Nitrate   |
| F                | - | Fluoride    | SiO <sub>2</sub> | - | Silica    |
| HCO <sub>3</sub> | - | Bicarbonate | SO <sub>4</sub>  | - | Sulfate   |

# MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in					Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K		CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH
NORTH COASTAL REGION 1-00.00																		
UKIAH VALLEY 1-15.00																		
14N/12W-11N01 M	62	8.4	345	27	25	11		3	162		9.3						169	
7-27-71 5050		7.1	345	1.35	2.03	0.48		0.10	2.66		0.26						31	
1000 5050				35	53	12												
15N/12W-35D01 M	67	7.6	373	38	11	29		0	218		16						140	
7-27-71 5050		7.1	395	1.90	0.90	1.26			3.58		0.45						0	
1130 5050				47	22	31												
17N/12W-28M01 M	62	7.3	172	13	8.4	10		0	70		6.0						67	
7-27-71 5050		6.1	172	0.65	0.69	0.44			1.15		0.17						10	
1240 5050				36	39	25												
SANEL VALLEY 1-16.00																		
13N/11W-07D01 M	59	7.8	300	21	23	11		0	1.73		6.0						145	
7-27-71 5050		7.0	290	1.05	1.85	0.48			2.84		0.17						3	
1415 5050				31	55	14												
13N/11W-18D02 M	66	8.2	618	30	58	16		0	322		19						313	
7-27-71 5050		7.3	600	1.50	4.75	0.70			5.28		0.54						49	
1455 5050				22	68	10												
13N/11W-19N01 M	64	7.9	304	25	21	6.8		0	160		6.2						150	
7-27-71 5050		7.3	295	1.25	1.75	0.30			2.62		0.17						19	
1545 5050				38	53	9												
ALEXANDER VALLEY 1-17.00																		
11N/10W-33G01 M	--	7.4	193	11	7.4	14		0	62		19						58	
7-27-71 5050		6.3	185	0.55	0.61	0.61			1.02		0.54						7	
1645 5050				31	34	35												
SANTA ROSA VALLEY 1-18.00																		
SANTA ROSA AREA 1-18.01																		
05N/09W-03F01 M	75	8.4	494	12	3.4	94		4	228		30						44	
7-28-71 5050		9.2	500	0.60	0.28	4.09		0.13	3.74		0.85						0	
1345 5050				12	6	82												
07N/06W-29P01 M	64	8.1	233	15	10	20		0	139		10						80	
7-28-71 5050		7.4	238	0.75	0.85	0.87			2.28		0.28						0	
1030 5050				30	35	35												
07N/08W-03L01 M	66	8.2	505	27	20	54		0	273		24						149	
7-28-71 5050		7.2	500	1.35	1.63	2.35			4.47		0.68						0	
0800 5050				25	31	44												
07N/09W-36M01 M	68	8.2	336	28	8.5	32		0	174		17						105	
7-28-71 5050		7.4	340	1.40	0.70	1.39			2.85		0.48						0	
1145 5050				40	20	40												
08N/08W-20Q01 M	--	8.2	509	5.8	10	89		0	248		34						56	
7-28-71 5050		7.3	500	0.29	0.83	3.87			4.06		0.96						0	
0900 5050				6	17	77												
ANDERSON VALLEY 1-19.00																		
13N/14W-02L01 M	63	---	---															
5-10-71 -		6.1	175															
1300 5050																		
13N/14W-11A01 M	65	---	---															
5-10-71 -		7.1	259															
1220 5050																		
14N/14W-18R02 M	65	---	---															
5-10-71 -		5.9	100															
1345 5050																		
14N/14W-19B01 M	65	7.7	388	24	17	22	0.9	0	70	9.1	75	0.3		0.2	262	131		
5-10-71 5050		6.3	420	1.20	1.42	0.96	0.02		1.15	0.19	2.11	0.00				74		
1400 5050				33	39	27	1		33	6	61							
14N/14W-34G06 M	64	---	---															
5-10-71 -		7.4	590															
1325 5050																		
POINT ARENA 1-20.00																		
12N/16W-18K01 M	54	6.8	421					0	9		60	115					97	
5-11-71 5050		5.5	420						0.15		1.69	1.85					90	
0730 5050																		

TABLE E-1 (Cont.)

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in								Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH				
POINT ARENA 1-20.00 (Continued)																					
12N/17W-12L01 M	57	---	---																		
5-11-71 -		5.9	122																		
0710 5050																					
13N/16W-31M01 M	57	---	---																		
5-11-71 -		5.9	405																		
0810 5050																					
13N/17W-24D01 M	59	7.5	300	814	4.1	40	1.3	0	19	9.4	57	18		0.0		184		38			
5-10-71 5050		6.3	310	0.42	0.34	1.74	0.03		0.31	0.20	1.61	0.29						22			
1530 5050				17	13	69	1		13	8	67	12									
13N/17W-25H01 M	62	---	---																		
5-10-71 -		5.9	410																		
1600 5050																					
FORT BRAGG TERRACE 1-21.00																					
17N/17W-30F01 M	57	---	---																		
5-11-71 -		5.7	800																		
1020 5050																					
17N/17W-30M01 M	54	7.7	314	11	10	32	4.8	0	43	25	44	20		0.1		188		69			
5-11-71 5050		6.3	315	0.55	0.83	1.39	0.12		0.70	0.52	1.24	0.32						34			
0915 5050				19	29	48	4		25	19	45	11									
19N/17W-20N01 M	58	---	---																		
5-11-71 -		5.9	175																		
1200 5050																					
19N/17W-30G01 M	57	---	---																		
5-11-71 -		5.9	280																		
1145 5050																					
19N/17W-30Q01 M	56	---	---																		
5-11-71 -		6.5	358																		
1130 5050																					
SAN FRANCISCO BAY REGION 2-00.00																					
PETALUMA VALLEY 2-01.00																					
03N/06W-01Q01 M	70	8.3	1300	33	31	218	4.9	0	586	0.2	148	10		0.2		749		209			
7-29-71 5050		7.7	1400	1.65	2.53	9.48	0.12		9.60	0.00	4.18	0.16						0			
0930 5050				12	18	69	1		69		30	1									
03N/06W-18M01 M	61	7.9	555	30	37	27		0	197		45							229			
7-29-71 5050		6.7	560	1.50	3.08	1.17			3.23		1.27							68			
0830 5050				26	54	20															
04N/06W-18E01 M	62	8.3	991	63	59	81		0	532		55							399			
7-28-71 5050		7.5	1010	3.14	4.83	3.52			8.72		1.55							0			
1730 5050				27	42	31															
04N/06W-21Q01 M	72	8.3	1130	19	15	2.04		0	374		175							108			
7-29-71 5050		7.9	1190	0.95	1.21	8.87			6.13		4.94							0			
1030 5050				9	11	80															
05N/07W-26E01 M	66	8.3	759	48	22	83		0	342		70							211			
7-28-71 5050		7.7	760	2.40	1.82	3.61			5.60		1.97							0			
1600 5050				31	23	46															
05N/07W-34E02 M	65	8.8	861	6.9	3.9	174		19	372		72							33			
7-28-71 5050		8.9	875	0.34	0.32	7.57		0.63	6.10		2.03							0			
1500 5050				4	4	92															
NAPA-SONOMA VALLEY 2-02.00																					
NAPA VALLEY 2-02.01																					
03N/03W-18G01 M	66	7.8	1130	71	51	89		0	374		157							388			
8-05-71 5050		7.3	1010	3.54	4.21	3.87			6.13		4.43							81			
0900 5050				31	36	33															
04N/04W-05C01 M	70	7.8	300	7.8	6.9	44		0	88		29							48			
8-05-71 5050		7.1	298	0.39	0.57	1.91			1.44		0.82							0			
1140 5050				14	20	66															
04N/04W-14C02 M	68	7.7	1610	101	51	150		0	319		352							463			
8-05-71 5050		7.3	1700	5.04	4.21	6.52			5.23		9.93							201			
1700 5050				32	27	41															
05N/04W-09Q02 M	65	8.0	497	24	15	61		0	220		45							122			
8-05-71 5050		7.3	475	1.20	1.24	2.65			3.60		1.27							0			
1250 5050				24	24	52															

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH
NAPA VALLEY 2-02.01 (Continued)																	
05N/04W-15E01 M 8-05-71 5050 1045 5050	64	7.8 7.4	402 395	19 0.95	14 1.15	48 2.09		0	203 3.33		30 0.85					105 0	
06N/04W-15Q01 M 8-05-71 5050 1340 5050	76	7.9 7.1	243 220	9.6 0.48	6.8 0.56	32 1.39		0	125 2.05		7.6 0.21				52 0		
07N/05W-06F01 M 8-05-71 5050 1630 5050	65	8.2 7.2	290 285	20 1.00	12 1.02	22 0.96	0.8 0.02	0	163 2.67	5.1 0.11	7.0 0.20	11 0.18	0.2		177 0		
08N/06W-06L05 M 8-05-71 5050 1500 5050	75	8.0 7.3	270 265	6.7 0.33	5.7 0.47	41 1.78	10 0.26	0	136 2.23	16 0.33	6.2 0.17	0.6 0.01	0.2		214 0		
SONOMA VALLEY 2-02.02																	
04N/05W-14D02 M 7-29-71 5050 1130 5050	72	8.2 7.3	965 1000	14 0.70	12 0.98	184 8.00		0	307 5.03		141 3.98				84 0		
05N/05W-28R01 M 7-29-71 5050 1530 5050	68	8.3 8.1	1020 1000	14 0.70	8.8 0.72	218 9.48	1.3 0.03	0	460 7.54	36 0.75	89 2.51	0.8 0.01	1.1		615 0		
05N/06W-12F01 M 7-29-71 5050 1245 5050	64	7.7 6.8	462 465	23 1.15	20 1.61	44 1.91		0	194 3.18		40 1.13				138 0		
06N/06W-23M02 M 7-29-71 5050 1330 5050	74	8.2 7.7	496 490	16 0.80	7.8 0.64	71 3.09		0	1.44 2.36		84 2.37				72 0		
06N/06W-26E01 M 7-29-71 5050 1430 5050	72	8.0 8.1	409 410	2.7 0.13	0.4 0.03	78 3.39	10 0.26	0	144 2.36	2.6 0.05	50 1.41	0.1 0.00	1.6		296 0		
SUISUN-FAIRFIELD VALLEY 2-03.00																	
03N/01E-21D01 M 8-02-71 5050 1500 5050	70	8.5 8.1	2540 2500	25 1.25	27 2.19	492 21.40		17 0.57	668 10.95		450 12.69				172 0		
04N/01E-08F01 M 8-02-71 5050 1600 5050	73	8.1 7.3	973 975	48 2.40	22 1.80	136 5.92		0	240 3.93		164 4.63				210 14		
04N/02W-04D01 M 8-03-71 5050 0845 5050	68	8.3 7.5	1450 1350	75 3.74	89 7.31	150 6.52		0	7.09 11.62		130 3.67				553 0		
04N/02W-18M01 M 8-03-71 5050 0945 5050	--	8.3 7.5	1150 1200	112 5.59	39 3.22	90 3.92		0	4.04 6.62		110 3.10				441 110		
05N/01W-25R01 M 8-02-71 5050 1630 5050	65	9.2 7.3	1670 1700	118 5.89	32 2.62	178 7.74		0	252 4.13		418 11.79				426 219		
05N/02W-21P03 M 8-03-71 5050 0800 5050	65	8.2 7.2	964 975	96 4.79	36 2.92	69 3.00		0	442 7.24		64 1.80				386 24		
PITTSBURG PLAIN 2-04.00																	
02N/01W-04Q01 M 8-04-71 5050 1215 5050	67	- 7.5	3770 4000			500 21.75					855 24.12						
02N/01W-11R01 M 8-04-71 5050 1130 5050	70	8.1 7.5	923 950	56 2.79	52 4.30	61 2.65	3.7 0.09	0	360 5.90	90 1.87	68 1.92	24 0.39	0.2		615 60		
CLAYTON VALLEY 2-05.00																	
02N/01W-30J01 M 8-04-71 5050 1315 5050	69	7.4 7.2	1030 1025	90 4.49	52 4.24	61 2.65		0	398 6.52		58 1.64				437 111		
02N/01W-31D01 M 8-04-71 5050 1345 5050	75	7.6 7.3	1070 1125	86 4.29	63 5.20	45 1.96		0	358 5.87		119 3.36				475 181		
02N/02W-26B01 M 8-04-71 5050 1500 5050	68	7.6 7.9	943 975	41 2.05	32 2.63	111 4.83		0	354 5.80		133 3.75				234 0		



## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in						Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH		
CLAYTON VALLEY 2-05.00 (Continued)																			
02N/02W-36J01 M	66	7.7	1270	69	50	136		0	405	137							377		
8-04-71 5050		7.3	1250	3.44	4.09	5.92			6.64	3.86							45		
1415 5050				26	30	44													
YGNACIO VALLEY 2-06.00																			
01N/02W-11N01 M	67	7.9	1410	93	43	158		0	538	176							410		
8-04-71 5050		7.4	1450	4.64	3.55	6.87			8.82	4.96							0		
1545 5050				31	23	46													
02N/02W-35D01 M	65	7.5	2730	119	127	250	1.2	0	462	450	374	2.2		2.6	1630	818			
8-12-71 5050		7.3	3000	5.94	10.40	10.88	0.03		7.57	9.37	10.55	0.04				439			
0900 5050				22	38	40	0		28	34	38	0							
SANTA CLARA VALLEY 2-09.00																			
EAST BAY AREA - - BAY PLAIN 2-09.01																			
01S/04W-04A01 M	--	7.8	1240	85	55	95		0	372	172							440		
8-10-71 5050		---	---	4.24	4.55	4.13			6.10	4.85							135		
1230 5100				33	35	32													
02S/03W-28G01 M	--	8.2	974	73	26	89		0	276	153							289		
8-10-71 5050		---	----	3.64	2.13	3.87			4.52	4.32							63		
0915 5100				38	22	40													
02S/04W-12R01 M	66	8.2	371	23	12	36		0	164	36							106		
8-10-71 5050		---	----	1.15	0.97	1.57			2.69	1.02							0		
0950 5100				31	26	43													
02S/04W-25A01 M	--	8.3	806	45	13	109		0	300	96							165		
8-10-71 5050		---	----	2.25	1.05	4.74			4.92	2.71							0		
0930 5100				28	13	59													
03S/02W-07J01 M	64	7.6	1100	106	44	71		0	451	74							444		
8-10-71 5050		---	----	5.29	3.58	3.09			7.39	2.09							74		
0815 5100				44	30	26													
03S/02W-32D02 M	74	8.3	791	36	11	134		0	276	89							133		
8-10-71 5050		---	----	1.80	0.86	5.83			4.52	2.51							0		
0800 5100				21	10	69													
EAST BAY AREA - - ABOVE HAYWARD FAULT 2-09.01																			
04S/01W-07R05 M	64	8.0	1802	168	63	1.2		0	362	42	348	78		0.1	1230	679			
9-22-71 5050		6.8	1800	8.37	5.20	4.44	0.03		5.93	0.87	9.82	1.26				382			
1200 5401				46	29	25	0		33	5	55	7							
04S/01W-21P06 M	63	8.0	638			46		0	219	56							226		
9-29-71 5050		7.4	690			2.00			3.59	1.58							47		
1300 5401						31													
04S/01W-27B04 M	--	8.0	1080	95	25	87	1.2	0	386	113	58	33		0.7	612	340			
6-11-71 5050		---	----	4.75	2.04	3.78	0.03		6.33	2.35	1.64	0.53				23			
- 5401				45	19	36	0		58	22	15	5							
04S/01W-27K01 M	--	7.8	1540	88	78	152	1.6	0	560	162	154	29		1.0	923	540			
6-10-71 5050		---	----	4.37	6.42	6.61	0.04		9.18	3.37	4.34	0.47				81			
- 5401				25	37	38	0		53	19	25	3							
04S/01W-34R02 M	68	7.7	627			72		0	3.04	41							170		
9-29-71 5050		7.6	820			3.13			4.98	1.16							0		
0905 5401						48													
EAST BAY AREA - UPPER AQUIFER 2-09.01																			
04S/01W-18C02 M	66	8.2	894			53		0	313	65							360		
9-22-71 5050		7.4	970			2.30			5.13	1.83							104		
0745 5401						24													
04S/01W-19J07 M	60	7.8	899			45		0	235	116							355		
9-29-71 5050		7.4	1000			1.96			3.85	3.27							163		
0800 5401						22													
04S/01W-33C01 M	63	8.0	1720			146		0	657	141							624		
9-22-71 5050		7.2	1720			6.35			10.77	3.98							85		
1420 5401						34													
04S/02W-14P02 M	--	7.5	13040	1300	663	738	7.0	0	195	206	5050	0.9		0.7	9840	5970			
5-26-71 5050		---	----	64.77	54.51	32.10	0.18		3.20	4.29	142.46	0.01				5810			
-- 5401				43	36	21	0		2	3	95	0							
04S/02W-24F06 M	64	7.4	6750			173		0	284	2180							3080		
10-06-71 5050		6.7	7000			7.52			4.65	61.50							2847		
1430 5401						11													

TABLE E-1 (Cont.)

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter			
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM
EAST BAY AREA -- LOWER AQUIFER 2-09.01																
04S/01W-07P02 M 9-21-71 5050 0915 5401	64	8.3 7.1	900 920			56 2.44 26		0	353 5.78		59 1.66				357 68	
04S/01W-29L12 M 9-29-71 5050 1215 5401	62	7.9 7.3	2230 2400			71 3.09 15		0	197 3.23		585 16.50				913 751	
04S/01W-30E03 M 6-04-71 5050 -- 5401	--	7.9 ---	1760 ----	178 8.88	51 4.17	87 3.78	2.2 0.06	0	232 3.80	47 0.98	430 12.13	5.4 0.09	0.4	1300	653 463	
04S/01W-30E03 M 9-29-71 5050 0930 5401	66	---	2100 1840								556 15.68					
04S/01W-31B03 M 9-30-71 5050 1000 5401	66	7.6 7.3	3460 3150			90 3.92 12		0	170 2.79		1020 28.77				1460 1320	
04S/02W-11Q10 M 9-21-71 5050 1025 5401	66	7.8 7.5	786 875			43 1.87 23		0	267 4.38		81 2.28				310 91	
04S/02W-23F02 M 9-21-71 5050 1230 5401	65	8.0 7.4	1280 1270			52 2.26 18		0	238 3.90		247 6.97				516 320	
04S/02W-27L01 M 9-29-71 5050 0830 5401	68	8.4 7.9	595 650			110 4.78 75		4 0.13	303 4.97		26 0.73				77 0	
05S/01W-01R01 M 5-26-71 5050 -- 5401	--	8.6 ---	762 ---	64 3.17	24 1.99	74 3.22	1.8 0.05	0	339 5.56	13 0.27	76 2.14	15 0.24	0.1	414	258 0	
05S/01W-04D01 M 9-29-71 5050 0930 5401	70	8.5 7.9	615 650			117 5.09 79		5 0.17	278 4.56		36 1.02				66 0	
05S/01W-08A03 M 9-21-71 5050 1330 5401	76	8.4 8.0	633 630			125 5.44 81		5 0.17	332 5.44		19 0.54				64 0	
05S/01W-17A01 M 5-25-71 5050 -- 5401	--	8.7 ---	516 ---	7.4 0.37	2.6 0.21	111 4.83	0.6 0.02	0	282 4.62	29 0.60	12 0.34	0.7 0.07	0.3	301	29 0	
05S/02W-01N01 M 5-25-71 5050 -- 5401	--	8.7 ---	429 ---	3.8 0.19	2.3 0.19	90 3.92	0.6 0.02	0	220 3.60	24 0.50	14 0.39	0.3 0.00	0.2	249	19 0	
05S/02W-01N01 M 9-21-71 5050 1300 5401	76	8.2 7.8	431 450			94 4.09 91		0	217 3.56		14 0.39				20 0	
05S/02W-14E03 M 10-06-71 5050 0830 5401	66	8.2 8.1	433 490			63 2.74 61		0	229 3.75		16 0.45				89 0	
SOUTH BAY AREA 2-09.02																
05S/01E-31R01 M 6-28-71 5050 -- 2400	--	8.3 ---	1020 ---			112 4.87 48		0	207 3.39		143 4.03				263 93	
06S/01E-17G05 M 6-11-71 5050 -- 2400	72	8.1 ---	619 ---	26 1.28	5.1 0.42	104 4.52	1.4 0.04	0	266 4.36	41 0.85	44 1.24	0.0	0.4	344	85 0	
06S/01E-21R01 M 6-25-71 5050 -- 2400	--	---	650 ---								48 1.35					
06S/01E-22P01 M 6-25-71 5050 -- 2400	--	8.2 ---	721 ---			75 3.26 44		0	284 4.65		54 1.52				208 0	
06S/01W-14E01 M 6-28-71 5050 -- 2400	--	8.1 ---	505 ---			50 2.18 43		0	170 2.79		37 1.04				146 7	
06S/01W-15P01 M 7-14-71 5050 -- 2400	--	---	429 ---								12 0.34					
06S/01W-18P01 M 7-14-71 5050 -- 2400	--	---	519 ---								23 0.65					

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH
SOUTH BAY AREA 2-09.02 (Continued)																	
06S/01W-26D02 M 7-06-71 5050 -- 2400	--	---	483									19 0.54					
06S/01W-31F01 M 6-25-71 5050 -- 2400	--	---	615									62 1.75					
06S/02W-09Q02 M 6-28-71 5050 -- 2400	--	8.2 ---	620 ---			50 2.18 32		0	287 4.70		28 0.79					227 0	
06S/02W-20N01 M 6-29-71 5050 -- 2400	--	8.2 ---	463 ---			27 1.17 25		0	190 3.11		33 0.93					178 23	
06S/02W-34N01 M 6-28-71 5050 -- 2400	--	---	650									37 1.04					
07S/01E-24A01 M 6-25-71 5050 -- 2400	--	---	740									23 0.65					
07S/02E-18B01 M 6-25-71 5050 -- 2400	--	8.1 ---	1260 ----	92 4.60 33	49 4.02 29	121 5.26 38	1.4 0.04 0	0	541 8.87 64	92 1.92 14	87 2.45 18	36 0.58 4	0.3		753	432 0	
07S/02E-20B01 M 6-25-71 5050 -- 2400	--	---	822									42 1.18					
07S/02E-33C04 M 6-28-71 5050 -- 2400	---	8.1 ---	928 ---			56 2.44 24		0	455 7.46		47 1.32					386 13	
07S/01W-06B01 M 6-28-71 5050 -- 2400	--	---	534									48 1.35					
08S/01E-04M01 M 6-11-71 5050 -- 2400	64	8.1 ---	491 ---	42 2.08 39	30 2.46 46	17 0.74 14	1.0 0.03 1	0	235 3.85 72	35 0.73 14	23 0.65 12	6.8 0.11 2	0.1		258	227 35	
08S/01E-08P03 M 6-14-71 5050 -- 2400	--	7.8 ---	364 ---	24 1.22 32	20 1.61 42	23 1.00 26	0.6 0.02 0	0	172 2.82 74	28 0.58 15	14 0.39 10	2.5 0.04 1	0.2		182	142 1	
08S/01E-09L03 M 6-25-71 5050 -- 2400	--	---	457									18 0.51					
08S/01E-20Q01 M 6-11-71 5050 -- 2400	--	7.9 ---	486 ---	33 1.64 30	40 3.26 59	13 0.56 10	1.2 0.03 1	0	293 4.80 90	17 0.35 6	7.4 0.21 4	0.3 0.00	0.2		257	246 6	
08S/01E-27C01 M 6-11-71 5050 -- 2400	--	7.5 ---	756 ---	39 1.96 23	65 5.32 61	31 1.35 16	0.3 0.01 0	0	365 5.98 69	83 1.73 20	21 0.59 7	23 0.37 4	0.4		424	364 65	
08S/01E-27C02 M 6-28-71 5050 -- 2400	--	8.5 ---	729 ---			28 1.22 15		12 0.40	326 5.34		21 0.59					357 70	
08S/01E-27G01 M 6-11-71 5050 -- 2400	--	7.7 ---	764 ---	37 1.87 22	63 5.17 60	36 1.57 18	0.5 0.01 0	0	366 6.00 70	65 1.35 16	35 0.99 11	14 0.23 3	0.5		434	352 52	
08S/01E-36M02 M 6-14-71 5050 -- 2400	--	7.9 ---	2910 ----	136 6.79 19	274 22.53 64	139 6.05 17	0.8 0.02 0	0	662 10.85 31	552 11.49 33	380 10.72 31	112 1.81 5	0.2		2100	1468 924	
08S/02E-07F01 M 6-25-71 5050 -- 2400	--	8.4 ---	545			28 1.22 21		3 0.10	200 3.28		20 0.56					228 59	
08S/02E-17A01 M 6-28-71 5050 -- 2400	--	---	254									16 0.45					
08S/01W-15B01 M 6-29-71 5050 -- 2400	--	8.4 ---	633			27 1.17 18		2 0.07	226 3.70		32 0.90					274 85	
09S/02E-02C01 M 6-28-71 5050 -- 2400	--	8.3 ---	537			33 1.44 26		0	184 3.02		23 0.65					209 58	

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in							Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH			
LIVERMORE VALLEY 2-10.00																				
02S/02E-35G02 M 8-09-71 5050 1250 5100	71	8.0 ---	3730 ----	100 4.99 14	87 7.12 21	510 22.18 65		0	407 6.67		967 27.28							606 272		
03S/01E-08H03 M 8-09-71 5050 0945 5100	62	8.0 ---	1380 ----	76 3.79 26	93 7.68 53	72 3.13 21		0	416 6.82		210 5.92							574 233		
03S/01E-11H01 M 8-09-71 5050 1005 5100	--	8.1 ---	909 ---	53 2.64 27	62 5.13 53	46 2.00 20		0	355 5.82		97 2.74							389 98		
03S/01E-15L01 M 8-09-71 5050 1345 5100	--	8.2 ---	476 ---	39 1.94 39	19 1.60 32	34 1.48 29		0	198 3.24		32 0.90							177 15		
03S/02E-08H01 M 8-10-71 5050 -- 5100	--	8.3 ---	749 ---	40 2.00 26	50 4.11 52	39 1.70 22		0	265 4.34		69 1.95							306 89		
03S/02E-29D01 M 8-09-71 5050 1020 5100	--	8.2 ---	687 ---	51 2.55 35	33 2.70 37	46 2.00 28		0	268 4.39		57 1.61							263 43		
03S/03E-19C01 M 8-09-71 5050 1230 5100	--	8.3 ---	1630 ----	36 1.80 11	45 3.71 22	256 11.14 67	2.0 0.05 0	0	540 8.85 51	104 2.16 12	228 6.43 37	0.0		6.3		937	276 0			
CENTRAL COASTAL REGION 3-00.00																				
PAJARO VALLEY 3-02.00																				
12S/01E-11N01 M 3-24-71 5050 1130 5050	--	8.3 ---	607 ---	37 1.85 32	34.7 2.85 49	25 1.09 19		0	155 2.54		74 2.09 0.61	38						235		
12S/01E-11N01 M 8-11-71 5050 1000 5050	68	8.4 ---	682 ---	47 2.35 36	37 3.04 46	27 1.17 18		6 0.20	126 2.07		100 2.82 0.68	42						270		
12S/01E-25G01 M 3-24-71 5050 -- 5050	--	8.3 ---	518 ---	23 1.15 22	24.2 1.99 38	48 2.09 40		0	213 3.49		29 0.82	0.0						157		
12S/02E-18K03 M 8-11-71 5050 1400 5050	67	8.6 ---	418 ---	48 2.40 53	13 1.07 23	25 1.09 24		7 0.23	198 3.25		14 0.39	0.0						175		
GILROY-HOLLISTER VALLEY 3-03.00																				
SOUTH SANTA CLARA COUNTY 3-03.01																				
09S/03E-25N03 M 6-14-71 5050 -- 5114	--	8.3 ---	460 450 21	41 2.00 36	21 1.73 22	25 1.09 1	1.3 0.03 1	0	189 3.10 64	21 0.44 9	23 0.65 13	43 0.69 14		0.0		283	187			
09S/03E-33G02 M 6-08-71 5050 -- 5114	--	8.1 ---	482 470 40	41 2.05 34	21 1.73 25	30 1.30 25	1.1 0.03 1	0	215 3.53 67	40 0.83 16	17 0.48 9	26 0.42 8		0.0		292	190			
10S/03E-01E02 M 6-14-71 5050 -- 5114	--	8.3 ---	553 540 41	49 2.45 47	34 2.79 47	16 0.70 12	0.8 0.02 0	0	255 4.18 69	37 0.77 13	19 0.54 9	34 0.55 9		0.0		348	263			
10S/03E-02K01 M 6-14-71 5050 -- 5114	--	8.2 ---	380 370 46	39 1.95 46	22 1.81 42	12 0.52 12		0	198 3.25		10 0.28 0.23	14					188			
10S/03E-11G01 M 6-14-71 5050 -- 5114	--	7.6 ---	404 390 46	41 2.05 46	23 1.89 42	12 0.52 12		0	216 3.54		12 0.34 0.07	4.1 0.07					198			
10S/03E-13D02 M 6-16-71 5050 -- 5114	--	8.3 ---	495 490 43	48 2.40 43	30 2.47 44	16 0.70 13		0	224 3.67		26 0.73 0.21	13 0.21					244			
10S/03E-14D01 M 6-08-71 5050 -- 5114	--	8.2 ---	595 590 24	31 1.55 24	52 4.27 65	16 0.70 11	0.5 0.01 0	0	273 4.48 69	24 0.50 8	40 1.13 17	25 0.40 6		0.0		378	290			
10S/03E-23J01 M 6-08-71 5050 -- 5114	--	8.2 ---	489 470 39	40 2.00 39	28 2.30 44	20 0.87 17		0	170 2.79		36 1.02 0.60	37 0.60					214			
10S/03E-26J01 M 6-08-71 5050 -- 5114	--	8.0 ---	472 450 43	43 2.15 43	25 2.06 41	18 0.78 16		0	162 2.66		32 0.90 0.37	23 0.37					209			

TABLE E-1 (Cont.)

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in										Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH	
SOUTH SANTA CLARA COUNTY 3-03.01 (Continued)																		
10S/04E-17F01 M 6-14-71 5050 -- 5114	--	8.3 ---	861 850	49 2.45 27	44 3.62 39	71 3.09 34	0.8 0.02 0	0	364 5.97 65	20 0.42 4	94 2.65 29	11 0.18 2	0.1	490	302			
10S/04E-18G02 M 6-14-71 5050 -- 5114	--	8.3 ---	522 510	43 2.15 39	31 2.55 46	19 0.83 15	0.8 0.02 0	0	228 3.74 66	29 0.60 11	31 0.87 15	28 0.45 8	0.0	325	234			
10S/04E-18J01 M 6-14-71 5050 -- 5114	--	8.5 ---	429 410	43 2.15 44	21 1.73 36	22 0.96 20		6 0.20	194 3.18		17 0.48	17 0.27			192			
10S/04E-28D02 M 6-14-71 5050 -- 5114	--	8.2 ---	554 550	33 1.65 27	37 3.04 50	32 1.39 23		0	248 4.07		34 0.96	19 0.31			235			
10S/04E-34L05 M 6-14-71 5050 -- 5114	--	8.2 ---	761 750	55 2.74 33	42 3.45 42	46 2.00 24	1.0 0.03 1	0	307 5.03 61	40 0.83 10	54 1.52 19	52 0.84 10	0.0	482	309			
11S/04E-03L02 M 6-14-71 5050 -- 5114	--	8.4 ---	470 460	44 2.20 42	20 1.64 32	31 1.35 26		6 0.20	220 3.61		17 0.48	11 0.18			193			
11S/04E-04Q03 M 6-14-71 5050 -- 5114	--	8.3 ---	841 830	68 3.39 36	60 4.93 52	25 1.09 12	0.5 0.01 0	0	325 5.33 55	90 1.87 20	27 0.76 8	104 1.67 17	0.1	551	415			
11S/04E-06B01 M 6-08-71 5050 -- 5114	--	8.3 ---	430 420	38 1.90 42	22 1.81 40	19 0.83 18	0.8 0.02 0	0	197 3.23 70	32 0.67 14	16 0.45 10	18 0.29 6	0.0	264	186			
11S/04E-18K02 M 6-14-71 5050 -- 5114	--	8.2 ---	693 680	63 3.14 41	40 3.29 43	29 1.26 16		0	240 3.94		22 0.62	73 1.18			320			
11S/04E-09P05 M 6-16-71 5050 -- 5114	--	8.4 ---	621 610	62 3.09 46	33 2.71 40	22 0.96 14		6 0.20	247 4.05		26 0.73	44 0.71			290			
11S/04E-16J01 M 2-26-71 5818 -- 5216	--	7.8 ---	631 ---	67 3.34 42	41 3.37 42	30 1.30 16	1.2 0.03 0	0.0	329 5.40 69	57 1.19 15	29 0.82 10	27 0.43 6	0.09	28	457	335		
11S/04E-16J01 M 6-16-71 5050 -- 5114	--	8.3 ---	806 800	85 4.24 46	45 3.70 40	29 1.26 14		0	340 5.58		30 0.85	53 0.85			398			
11S/04E-16L01 M 6-16-71 5050 -- 5114	--	8.3 ---	956 1070	39 1.95 18	82 6.74 61	52 2.26 21	1.1 0.03 0	0	449 7.36 68	91 1.89 17	51 1.44 13	13 0.21 2	0.1	548	436			
11S/04E-21B02 M 6-08-71 5050 -- 5114	--	8.2 ---	744 730	71 3.54 43	43 3.53 43	25 1.09 13	1.1 0.03 1	0	330 5.41 65	67 1.39 16	26 0.73 9	52 0.84 10	0.1	504	353			
SAN BENITO COUNTY 3-03.02																		
12S/05E-28L03 M 12-02-70 5050 1415 5050	63	8.1 7.2	1620 1400	76 3.79 19	101 8.30 42	171 7.44 38	4.7 0.12 1	0	695 11.40 59	239 4.97 26	106 2.99 15	2.1 0.03 0	1.1	985	606			
12S/05E-28L03 M 2-17-71 5050 -- 5050	63	8.2 7.3	1650 520	70 3.49 18	106 8.71 44	168 7.31 37	4.4 0.11 1	0	690 11.32 59	236 4.91 25	107 3.02 16	1.8 0.03 0	10.0	1080	610			
12S/05E-28L03 M 8-31-71 5050 0820 5050	--	7.7 ---	1740 ---	96 4.79 24	102 8.38 41	166 7.22 35		0	747 12.25 59	240 4.99 24	128 3.61 17	1.0 0.02 0		1120	659			
12S/05E-28N01 M 12-02-70 5050 1440 5050	63	8.2 7.2	1560 1450	68 3.39 18	99 8.14 44	155 6.74 37	5.3 0.14 1	0	556 9.12 50	303 6.30 34	103 2.90 16	2.6 0.04 0	1.0	975	578			
12S/05E-28N01 M 8-31-71 5050 0850 5050	--	7.6 ---	1780 ---	94 4.69 22	110 9.04 42	174 7.57 36		0	603 9.89 48	336 6.99 34	122 3.44 16	26 0.42 2		827	686			
12S/05E-28P01 M 8-31-71 5050 0740 5050	--	7.6 ---	1520 ---	82 4.09 23	93 7.64 42	144 6.26 35		0	633 10.38 58	226 4.70 26	103 2.90 16	4.4 0.07 0		982	588			
12S/05E-29J01 M 12-02-70 5050 1515 5050	57	8.3 7.5	2520 2350	38 1.90 7	65.6 5.39 20	444 19.31 73		0	474 7.77 29	378 7.86 29	385 10.86 41	19 0.31 1			365			
12S/05E-33A01 M 12-03-70 5050 1330 5050	52	7.8 7.3	2200 2000	92 4.59 16	143.2 11.77 42	268 11.66 42		0	1270 20.83 75	165 3.43 12	126 3.55 13	1.6 0.03 0			819			

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH
SAN BENITO COUNTY 3-03.02 (Continued)																	
12S/05E-33C01 M	--	7.6	1360	68	80	132		0	575	188	80	0.6				895	500
8-31-71 5050		---	---	3.39	6.58	5.74			9.43	3.91	2.26	0.01					
0730 5050				22	42	36			60	25	15	0					
12S/05E-33D04 M	65	7.8	2050	58	105	278		0	677	378	160	16					577
12-02-70 5050		7.8	1950	2.89	8.63	12.09			11.10	7.86	4.51	0.26					
0910 5050				12	37	51			47	33	19	1					
12S/05E-34N01 M	58	8.2	1130	46	68.8	97		0	387	206	75	0.0					398
12-02-70 5050		8.0	1100	2.30	5.66	4.22			6.35	4.28	2.12						
-- 5050				19	46	35			50	33	17						
SALINAS VALLEY 3-04.00																	
PRESSURE AREA 3-04.01																	
13S/02E-19J01 M	--	8.3	1230	89	40.8	111		0	221		307	1.6					390
3-24-71 5050		---	---	4.44	3.35	4.83			3.62		8.66	0.03					
1035 5050				35	27	38											
13S/02E-23L01 M	--	8.3	662	22	20.9	70		0	146		106	7.6					141
3-24-71 5050		---	---	1.10	1.72	3.04			2.39		2.99	0.12					
1435 5050				19	29	52											
13S/02E-29F01 M	68	8.6	544	36	16	61		8	188		65	1.7					146
8-10-71 5050		---	---	1.80	1.32	2.65		0.27	3.08		1.83	0.03					
1355 5050				31	23	46											
13S/02E-30A01 M	71	8.5	1640	116	47	142		8	173		397	18					482
8-10-71 5050		---	---	5.79	3.86	6.18		0.27	2.84		11.20	0.29					
1345 5050				37	24	39											
14S/02E-02C01 M	63	8.6	468	50	14	37		8	230		30	0.8					181
8-12-71 5050		---	---	2.50	1.15	1.61		0.27	3.77		0.85	0.01					
1025 5050				47	22	31											
14S/02E-05F02 M	74	8.5	646	52	16	59		8	169		70	3.5					194
8-11-71 5050		---	---	2.59	1.32	2.57		0.27	2.77		1.97	0.06					
1105 5050				40	20	40											
14S/02E-14N01 M	--	8.3	611	48	16.8	53		0	209		63	3.7					189
3-25-71 5050		---	---	2.40	1.38	2.31			3.43		1.78	0.06					
1455 5050				39	23	38											
14S/02E-14N01 M	64	8.1	615	53	18	51		0	205	45	72	4.1					208
8-11-71 5050		---	---	2.64	1.48	2.22			3.36	0.94	2.03	0.07					
0840 5050				42	23	35			52	15	32	1					
14S/02E-22F02 M	60	8.3	619	50	15.1	54		0	173		44	0.0					187
3-24-71 5050		7.3	675	2.50	1.24	2.35			2.84		1.24						
1450 5050				41	20	39											
14S/02E-25D01 M	62	8.3	687	66	19.2	54		0	192		47	1.9					244
3-24-71 5050		7.8	720	3.29	1.58	2.35			3.15		1.33	0.03					
1545 5050				45	22	33											
14S/02E-25F01 M	58	8.2	1570	124	48.9	136		0	310	238	250	13					511
3-24-71 5050		7.6	1550	6.19	4.02	5.92			5.08	4.95	7.05	0.21					
1610 5050				38	25	37			29	29	41	1					
14S/02E-26C01 M	61	8.3	912	90	30.7	63		0	217		101	2.6					351
3-25-71 5050		7.2	950	4.49	2.52	2.74			3.56		2.85	0.04					
1445 5050				46	26	28											
14S/02E-26C01 M	66	8.1	729	75	20	52		0	198		70	2.0					270
8-11-71 5050		---	---	3.74	1.64	2.26			3.25		1.97	0.03					
1600 5050				49	21	30											
15S/02E-02Q01 M	66	8.1	1470	176	54	86		0	532		109	0.0					660
8-11-71 5050		---	---	8.78	4.44	3.74			8.72		3.07						
1415 5050				52	26	22											
15S/02E-12C01 M	60	8.3	940	101	35.4	51		0	272		75	0.0					398
3-25-71 5050		7.3	875	5.04	2.91	2.22			4.46		2.12						
1040 5050				49	29	22											
15S/02E-12C01 M	68	8.2	1030	119	41	51		0	295		90	0.3					468
8-11-71 5050		---	---	5.94	3.37	2.22			4.84		2.54	0.00					
1300 5050				52	29	19											
SEASIDE AREA 3-04.08																	
14S/01E-24K01 M	--	7.7	743	49	18.6	67		0	97		122	77					199
10-09-70 5050		---	730	2.45	1.53	2.91			1.59		3.44	1.24					
0700 5050				36	22	42											

## MINERAL ANALYSES OF GROUND WATER

State Well Number Date Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in					Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO <sub>3</sub>	HCO <sub>3</sub>	SO <sub>4</sub>	Cl	NO <sub>3</sub>	F	B	SiO <sub>2</sub>	TDS SUM	TH NCH	
SEASIDE AREA 3-04.08 (Continued)																		
14S/01E-24Q04 M	--	7.3	1390	71	52.7	114		0	19		226	262					394	
10-09-70 5050	---	---	1350	3.54	4.33	4.96			0.31		6.37	4.22						
1000 5050				27	34	39												
14S/01E-25L01 M	--	7.7	472	17	13.0	51		0	40		105	21					96	
10-09-70 5050	---	---	460	0.85	1.07	2.22			0.66		2.96	0.34						
0730 5050				20	26	54												
14S/01E-25P01 M	--	7.5	602	33	15.7	57		0	66		96	74					147	
10-09-70 5050	---	---	590	1.65	1.29	2.48			1.08		2.71	1.19						
0900 5050				30	24	46												
14S/01E-25P02 M	--	7.5	550	22	17.3	52		0	30		102	54					126	
10-09-70 5050	---	---	530	1.10	1.42	2.26			0.49		2.88	0.87						
0840 5050				23	30	47												
MISCELLANEOUS AREA 3-80.00																		
19S/01E-08C01 M	--	7.8	743	34	20	54	0.6	0	154	36	74	13			0.0	313	169	
3-04-71 5050	---	---	---	1.70	1.64	2.35	0.02		2.53	0.75	2.09	0.21						
-- 5050				30	29	41	0		45	14	37	4						

TABLE E-2

## TRACE ELEMENT ANALYSES OF GROUND WATER

State Well Number	Date Sampled	Constituents in Milligrams per Liter					
		Arsenic	Barium	Cadmium	Lead	Mercury	Selenium
SAN FRANCISCO BAY REGION 2-00.00							
SANTA CLARA VALLEY 2-09.00							
EAST BAY AREA 2-09.01							
04S/01W-27B04M	6-11-71	0.00	0.1	0.00	0.00	0.0004	0.01
04S/01W-27F01M	6-11-71	0.00	0.2	0.00	0.00	0.0000	0.00
04S/01W-27K01M	6-10-71	0.00	0.1	0.00	0.00	0.0000	0.00
04S/01W-30E03M	6-04-71	0.00	0.3	0.00	0.00	0.0000	0.00
04S/02W-14P02M	5-26-71	0.00	0.5	0.00	0.00	0.0000	0.01
04S/03W-13B02M	5-26-71	0.00	0.1	0.00	0.00	0.0001	0.00
05S/01W-01R01M	5-26-71	0.00	0.2	0.00	0.00	0.0000	0.00
05S/01W-17A01M	5-25-71	0.00	0.1	0.00	0.00	0.0000	0.00
05S/02W-01N01M	5-25-71	0.00	0.2	0.00	0.00	0.0000	0.00
SOUTH BAY AREA 2-09.02							
06S/01E-17G05M	6-11-71	0.00	0.1	0.00	0.00	0.0000	0.00
08S/01E-04M01M	6-11-71	0.00	0.1	0.00	0.00	0.0000	0.00
08S/01E-08P03M	6-14-71	0.00	0.0	0.00	0.00	0.0000	0.00
08S/01E-20Q01M	6-11-71	0.00	0.1	0.00	0.00	0.0001	0.01
08S/01E-27C01M	6-11-71	0.00	0.1	0.00	0.00	0.0000	0.00
08S/01E-27G01M	6-11-71	0.00	0.1	0.00	0.00	0.0000	0.00
08S/01E-36M02M	6-14-71	0.00	0.1	0.00	0.00	0.0000	0.00



Appendix F: WASTE WATER



## INTRODUCTION

This appendix contains data on the volume and location of waste water discharged by 81 cooperating dischargers within the jurisdiction of the California Regional Water Quality Control Board, San Francisco Bay Region, and located in the Central Coastal Area. Data are presented for the period October 1, 1970, through September 30, 1971.

During the 1971 water year, the 81 dischargers released 880 thousand acre-feet of water, or an average of 786 million gallons per day, at 96 disposal plants.

TABLE F-1

QUANTITY OF WASTE WATER DISCHARGED,  
CENTRAL COASTAL AREA, 1971 WATER YEAR

Discharger	Average Discharge Rate (mg/d)	Volume Discharged (acre-feet)	Place of Discharge for Waste Water
Allied Chemical Corporation			
Nichols Plant	3.4*	3,808*	Suisun Bay
Richmond Plant	0.1*	112*	Castro Creek
Alviso, City of	0.2*	224*	San Francisco Bay
Basalt Rock Company			
Napa	0.2*	224*	Napa River
Petaluma	0.04*	45*	Petaluma River
San Rafael	0.6*	672*	San Pablo Strait
Benicia, City of	1.0	1,120	Carquinez Strait
Burlingame, City of	3.0*	3,360*	San Francisco Bay
C & H Sugar Refinery	25.6	28,676	Carquinez Strait
Calistoga, City of	0.3	336	Napa River
Central Contra Costa Sanitary District	24.1*	26,995	Suisun Bay
Chevron Chemical Company, Richmond	0.2	224	San Pablo Bay
Colgate Palmolive Company	0.9*	1,008*	San Francisco Bay
Concord, City of	5.1	5,713	Walnut Creek
Contra Costa County Sanitation District No. 7A	0.9	1,008	Suisun Bay
Crockett-Valona Sanitary District	0.3	336	Carquinez Strait
Dow Chemical Company, Western Division	24.4*	27,331*	New York Slough
East Bay Municipal Utility District, Special District No. 1	84.1	94,204	San Francisco Bay
Estero Municipal Improvement District	1.3*	1,456*	San Francisco Bay
Fairfield-Suisun Sewer District	4.2	4,705	Suisun Slough
Granada Sanitary District	0.2	224	Pacific Ocean
Guadalupe Valley Municipal Improvement District	0.2*	224*	Guadalupe Canal
Half Moon Bay, City of	0.3*	336*	Pacific Ocean
Hayward, City of	11.9	13,330	San Francisco Bay
Hercules, Incorporated	1.6	1,792	San Pablo Bay and Land
Humble Oil and Refining Company	3.4	3,808	Suisun Bay

TABLE F-1 (Continued)

QUANTITY OF WASTE WATER DISCHARGED,  
CENTRAL COASTAL AREA, 1971 WATER YEAR

Discharger	Average Discharge Rate (mg/d)	Volume Discharged (acre-feet)	Place of Discharge for Waste Water
Las Gallinas Valley Sanitary District	2.3	2,576	Miller Creek
Livermore, City of	3.2	3,584	Arroya Las Positas
Los Altos, City of	2.3	2,576	Mountain View Slough
Marin County Sanitary District No. 1	3.4	3,808	Corte Madera Creek
Marin County Sanitary District No. 6			
Ignacio Plant	0.7	784	Novato Creek
Novato Plant	2.3	2,576	Novato Creek
Martinez, City of	1.8*	2,016*	Carquinez Strait
McGraw Hill Company	0.02	22	Pond
Menlo Park Sanitary District	6.0*	6,721*	West Point Slough
Merck & Company, Inc.	5.1*	5,713*	San Francisco Bay
Mill Valley, City of	2.3	2,576	Richardson Bay
Millbrae, City of	2.4	2,688	San Francisco Bay
Milpitas Sanitary District	2.9	3,248	Coyote Creek
Montara Sanitary District	0.2	224	Pacific Ocean
Mountain View, City of	7.4	8,289	Mountain View Slough
Mountain View Sanitary District	0.9	1,008	Carquinez Strait
Napa County Sanitation District	5.4	6,049	Napa River
North San Mateo County Sanitation District	4.0	4,481	Pacific Ocean
Oro Loma Sanitary District	13.6	15,234	San Francisco Bay
Pacific Union College	0.2	224	Conn Creek and Land
Pacifica, City of			
Linda Mar Plant	1.4	1,568	Pacific Ocean
Sharp Park Plant	1.0	1,120	Pacific Ocean
Palo Alto, City of	13.3	14,898	San Francisco Bay
Petaluma, City of	2.7	3,024	Petaluma River
Phillips Petroleum Company, Avon Refinery	14.3	16,018	Suisun Bay
Pinole, City of	0.9	1,008	San Pablo Bay

TABLE F-1 (Continued)

QUANTITY OF WASTE WATER DISCHARGED,  
CENTRAL COASTAL AREA, 1971 WATER YEAR

Discharger	Average Discharge Rate (mg/d)	Volume Discharged (acre-feet)	Place of Discharge for Waste Water
Pittsburg, City of			
Camp Stoneman Plant	0.9	1,008	New York Slough
Montezuma Plant	1.3	1,456	Sacramento River
Pleasanton, City of	1.1*	1,232*	Land
Redwood City, City of **	6.5*	7,281*	Redwood Creek
Richardson Bay Sanitary District	0.2	224*	Raccoon Strait
Richmond, City of	8.1	9,073	San Francisco Bay
Rodeo Sanitary District	0.6*	672*	San Pablo Bay
St. Helena, City of	0.4	448	Napa River
San Carlos-Belmont, Cities of **	3.3	3,696	Steinberger Slough
San Francisco, City and County of			
Juvenile Court - Log Cabin Ranch School	0.02	22	Land
North Point Plant	65.5	73,369	San Francisco Bay
Richmond-Sunset Plant	21.0	23,523	Pacific Ocean
Southeast Plant	22.6	25,315	Islais Creek
San Francisco International Airport	0.9*	1,008*	San Francisco Bay
San Jose, City of	81.0	90,731	Coyote Creek
San Leandro, City of	7.1	7,953	San Francisco Bay
San Mateo, City of	11.8*	13,218*	San Francisco Bay
San Mateo, County of			
Boys Ranch	0.005	6	Pond
Honor Ranch No. 1	0.01	11	Land
San Pablo Sanitary District			
San Pablo Plant	7.9	8,849	San Pablo Bay
Tara Hills Plant	1.2	1,344	San Pablo Bay
San Quentin Prison	0.6	672	San Francisco Bay
San Rafael Sanitation District			
Main Plant	2.8	3,136	San Francisco Bay
Marin Bay Plant	0.1	112	San Francisco Bay
Sausalito-Marín City Sanitary District	1.9	2,128	San Francisco Bay
Sequoia Refining Corporation	0.1	112	San Pablo Bay

TABLE F-1 (Continued)

QUANTITY OF WASTE WATER DISCHARGED,  
CENTRAL COASTAL AREA, 1971 WATER YEAR

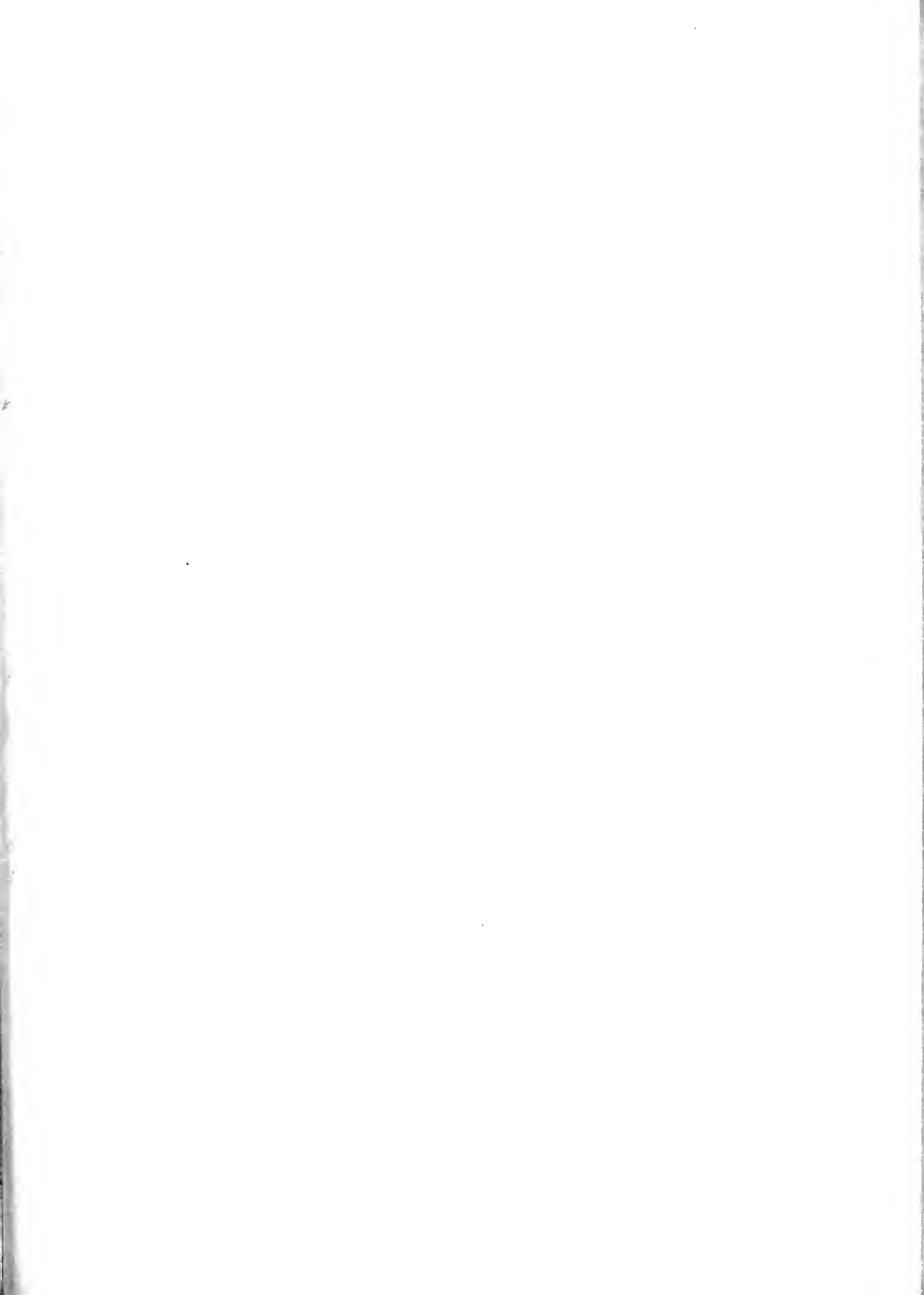
Discharger	Average Discharge Rate (mg/d)	Volume Discharged (acre-feet)	Place of Discharge for Waste Water
Shell Chemical Company, Pittsburg Plant	6.4	7,169	Suisun Bay
Shell Oil Company	4.5*	5,041*	Carquinez Strait
Sonoma Valley Sanitation District	2.1	2,352	Schell Slough
South San Francisco-San Bruno, Cities of	7.8*	8,737*	San Francisco Bay
Standard Oil Company, Western Operations, Richmond Refinery	114.0	127,696	San Pablo Bay
Stauffer Chemical Company			
Martinez Plant	0.1	112	Carquinez Strait
Richmond Plant	1.3*	1,456*	San Francisco Bay
Strategic Consolidated Sewerage Authority **	1.9	2,128	San Francisco Bay
Sunnyvale, City of	14.4	16,130	Guadalupe River
U. S. Steel Corporation, Pittsburg Plant	17.8	19,938	New York Slough
U. S. Veterans Administration Hospital, Livermore	0.1	112	Arroyo Valle
Union Oil Company, Oleum Refinery	48.9	54,775	San Pablo Bay
Union Sanitary District			
Newark Plant No. 1	5.5	6,161	Newark Slough
Irvington Plant No. 2	5.1	5,713	Mud Slough
Alvarado Plant No. 3	2.2	2,464	Alameda Creek
United Technology Center	0.05	56	Land and Pond
Vallejo Sanitation and Flood Control District	6.9	7,729	Carquinez Strait
Valley Community Services District	2.4	2,688	Alamo Canal
TOTAL	785.945	880,360	

\* Estimated

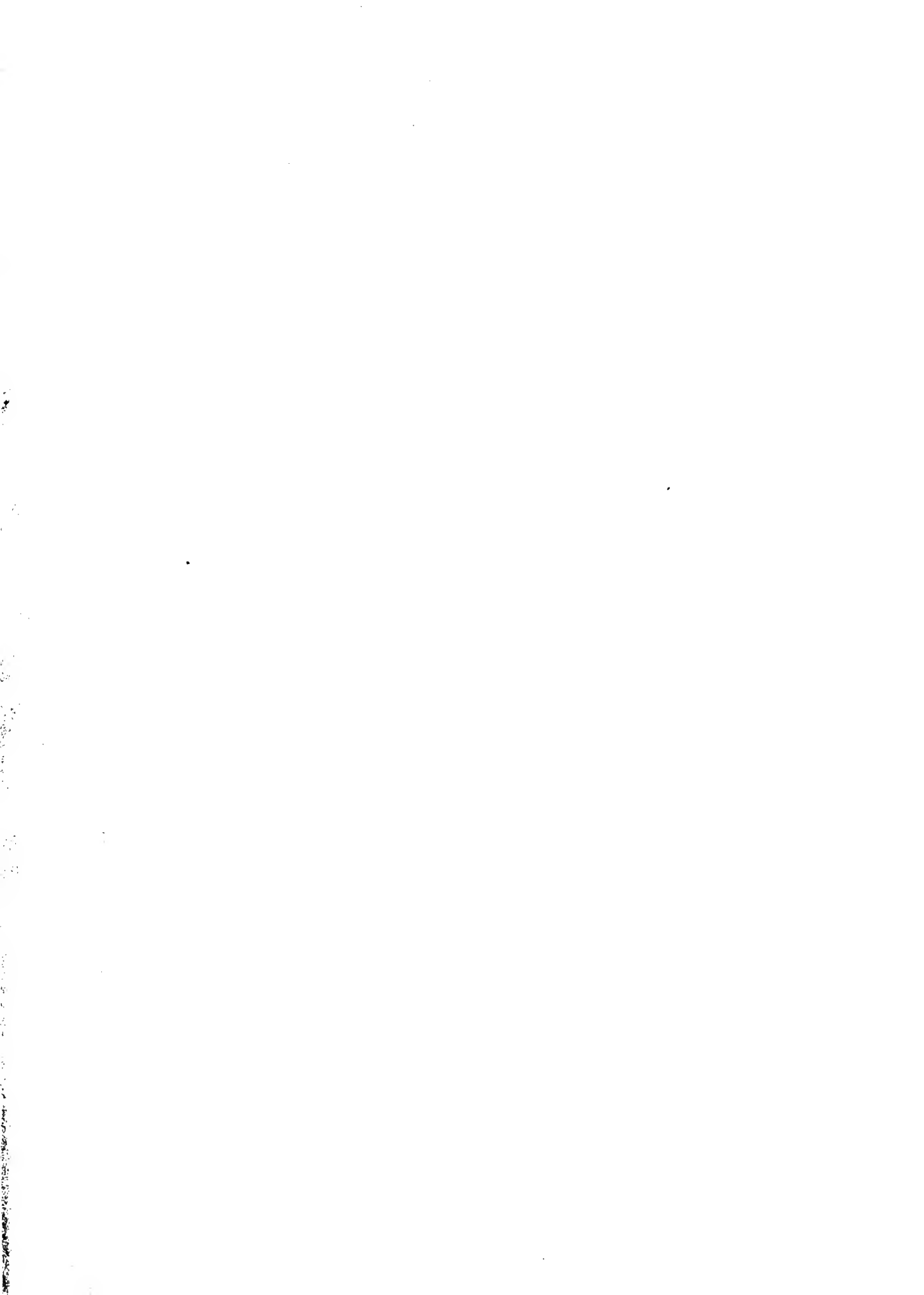
\*\* The City of Redwood City and Cities of San Carlos-Belmont plants combined on August 1, 1971, to form the Strategic Consolidated Sewerage Authority.

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